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SUBJECT OF EXAMINATION
IN THE
ENGLISH LANGUAGE,
APPOINTED BY THE
SENATE OF THE CALCUTTA UNIVERSITY
FOR THE
ENTRANCE EXAMINATION
OF
DECEMBER, 1859.

THOMSON'S WINTER.
HEBER'S PASSAGE OF THE RED SEA.
JOHNSON'S RASSELAS.
HERSHELL'S NATURAL PHILOSOPHY, CHAP. III.
PALEY'S NATURAL THEOLOGY, CHAP. XII.
TODD'S STUDENT'S GUIDE, CHAP. I.



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गुरुकुल पुरोहित पुस्तकालय
वनस्थली विद्यापीठ

श्रेणी संख्या.....

पुस्तक संख्या.....

आवृत्ति क्रमांक..... १४२१.....

WINTER.

“ EIN Regenstrom aus Felsenrissen—
Er Kommt mit Donners Ungestüm,
Bergtrümmer folgen seine Güssen,
Und Eichen stürzen unter ihm ;
Erstaunt, mit wollustvollem Gransen,
Hört ihn der Wanderer und lauscht,
Er hört die Flut vom Felsen brausen,
Doch weiss er nicht, woher sie rauscht.”

“ A rain-storm dashes from the rocks,
It rushes with the force of thunder,
The mountain mass breaks with its shocks,
And oaks are riven all asunder ;
Astounded, with most dread affright
The traveller hears, and lists intent,—
He hears the flood dash down with might,
Yet knows he not from whence 'tis sent.”

SCHILLER.

ARGUMENT.

The subject proposed.—Address to the Earl of Wilmington.—First approach of Winter.—According to the natural course of the season, various storms described.—Rain.—Wind.—Snow.—The driving of the snows ; a Man Perishing among them ; whence reflections on the wants and miseries of human life.—The wolves descending from the Alps and Apennines.—A winter-evening described : as spent by philosophers ; by the country people ; in the city.—Frost.—A view of winter within the Polar Circle.—A thaw.—The whole concluding with moral reflections on a future state.

SEE, Winter comes, to rule the varied year,
Sullen and sad, with all his rising train :
Vapours, and Clouds, and Storms. Be these my theme ;
These, that exalt the soul to solemn thought
And heavenly musing. Welcome, kindred glooms !
Congenial horrors, hail ! with frequent foot,
Pleas'd have I,—in my cheerful morn of life,
When nursed by careless solitude I liv'd,
And sung of Nature with unceasing joy :—
Pleas'd have I wander'd through your rough domain ;
Trode the pure virgin-snows, myself as pure ;
Heard the winds roar, and the big torrent burst ;
Or seen the deep fermenting tempest brew'd
In the grim evening sky. Thus pass'd the time,
Till through the lucid chambers of the South
Look'd out the joyous Spring,—look'd out, and smil'd.

To thee, the patron of her first essay,
 The Muse, O Wilmington ! renews her song.
 Since has she rounded the revolving year :
 Skimm'd the gay Spring ; on eagle-pinions borne,
 Attempted through the Summer-blaze to rise ;
 Then swept o'er Autumn with the shadowy gale ;
 And now among the Wint'ry clouds again,
 Roll'd in the doubling storm, she tries to soar ;
 To swell her note with all the rushing winds ;
 To suit her sounding cadence to the floods ;
 As is her theme, her numbers wildly great ;
 Thrice happy, could she fill the judging ear
 With bold description and with manly thought.
 Nor art thou skill'd in awful schemes alone,
 And how to make a mighty people thrive :
 But equal goodness, sound integrity,
 A firm, unshaken, uncorrupted soul
 A mid a sliding age, and burning strong,
 Not vainly blazing, for the country's weal,
 A steady spirit regularly free ;—
 These, each exalting each, the statesman light
 Into the patriot ; these, the public hope
 And eye to thee converting, bid the Muse
 Record what Envy dares not flattery call.

Now when the cheerless empire of the sky
 To Capricorn the Centaur Archer yields,
 And fierce Aquarius stains the inverted year ;
 Hung o'er the furthest verge of heaven, the Sun
 Scarce spreads through either the dejected day.
 Faint are his gleams, and ineffectual shoot
 His struggling rays, in horizontal lines,
 Through the thick air ; as, clothed in cloudy storm,
 Weak, wan, and broad, he skirts the southern sky ;
 And, soon-descending, to the long dark night,
 Wide-shading all, the prostrate world resigns.
 Nor is the night unwish'd ; while vital heat,
 Light, life, and joy, the dubious day forsake.
 Meantime, in sable cincture, shadows vast,
 Deep-tinged and damp, and congregated clouds,
 And all the vapoury turbulence of heaven,
 Involve the face of things. Thus Winter falls,
 A heavy gloom oppressive o'er the world,
 Through Nature shedding influence malign,
 And rouses up the seeds of dark disease.
 The soul of man dies in him, loathing life,
 And black with more than melancholy views.
 The cattle droop ; and o'er the furrowed land,
 Fresh from the plough, the dun discolour'd flocks,
 Untended spreading, crop the wholesome root.

Along the woods, along the moorish fens,
 Sighs the sad Genius of the coming storm ;
 And up among the loose disjointed cliffs,
 And fractured mountains wild, the brawling brook
 And cave, presageful, send a hollow moan,
 Resounding long in listening Fancy's ear.

Then comes the Father of the tempest forth,
 Wrapp'd in black glooms. First joyless rains obscure
 Drive through the mingling skies with vapour foul ;
 Dash on the mountain's brow, and shake the woods
 That grumbling wave below. Th' unsightly plain
 Lies a brown deluge ; as the low-bent clouds
 Pour flood on flood, yet unexhausted still
 Combine, and, deepening into night, shut up
 The day's fair face. The wanderers of heaven,
 Each to his home, retire ; save those that love
 To take their pastime in the troubled air,
 Or skimming flutter round the dimply pool.
 The cattle from th' untasted fields return,
 And ask, with meaning low, their wonted stalls,
 Or ruminate in the contiguous shade.
 Thither the household feathery people crowd,—
 The crested cock, with all his female train,
 Pensive and dripping ; while the cottage-hind
 Hangs o'er the' enlivening blaze, and taleful there
 Recounts his simple frolic : much he talks,
 And much he laughs, nor recks the storm that blows
 Without, and rattles on his humble roof.

Wide o'er the brim, with many a torrent swell'd,
 And the mix'd ruin of its banks o'erspread,
 At last the roused-up river pours along :
 Resistless, roaring, dreadful, down it comes,
 From the rude mountain, and the mossy wild,
 Tumbling through rocks abrupt, and sounding far
 Then o'er the sanded valley floating spreads,
 Calm, sluggish, silent ; till again, constrain'd
 Between two meeting hills, it bursts a way,
 Where rocks and woods o'erhang the turbid stream ;
 There gathering triple force, rapid and deep,
 It boils, and wheels, and foams, and thunders through.

Nature ! great parent ! whose unceasing hand
 Rolls round the Seasons of the changeful year !
 How mighty, how majestic are thy works !
 With what a pleasing dread they swell the soul,
 That sees astonish'd,—and astonish'd sings !
 Ye too, ye winds, that now begin to blow,
 With boisterous sweep, I raise my voice to you !

Where are your stores, ye powerful beings, say,
 Where your ærial magazines reserv'd,
 To swell the brooding terrors of the storm?
 In what far-distant region of the sky,
 Hush'd in deep silence, sleep ye when 'tis calm?

When from the pallied sky the Sun descends,
 With many a spot, that o'er his glaring orb
 Uncertain wanders, stain'd; red fiery streaks
 Begin to flush around. The reeling clouds
 Stagger with dizzy poise, as doubting yet
 Which master to obey; while rising slow,
 Blank, in the leaden-colour'd East, the Moon
 Wears a wan circle round her blunted horns.
 Seen through the turbid fluctuating air,
 The stars obtuse emit a shivering ray;
 Or frequent seem to shoot athwart the gloom,
 And long behind them trail the whitening blaze.
 Snatch'd in short eddies, plays the wither'd leaf;
 And on the flood the dancing feather floats.
 With broaden'd nostrils to the sky up-turn'd,
 The conscious heifer snuffs the stormy gale.
 E'en as the matron, at her nightly task,
 With pensive labour draws the flaxen thread,
 The wasted taper and the crackling flame
 Foretell the blast. But chief the plummy race,
 The tenants of the sky, its changes speak.
 Retiring from the downs, where all day long
 They pick'd their scanty fare, a blackening train
 Of clamorous rooks thick urge their weary flight,
 And seek the closing shelter of the grove:
 Assiduous, in his bower, the wailing owl
 Plies his sad song. The cormorant on high
 Wheels from the deep, and screams along the land,
 Loud shrieks the soaring hern; and with wild wing
 The circling sea-fowl cleave the flaky clouds.
 Ocean, unequal press'd, with broken tide
 And blind commotion heaves; while from the shore,
 Eat into caverns by the restless wave,
 And forest-rustling mountain, comes a voice,
 That solemn-sounding, bids the world prepare.
 Then issues forth the storm with sudden burst,
 And hurls the whole precipitated air
 Down in a torrent. On the passive main
 Descends th' ethereal force, and with strong gust
 Turns from its bottom the discolour'd deep.
 Through the black night that sits immense around,
 Lash'd into foam, the fierce—conflicting brine
 Seems o'er a thousand raging waves to burn:
 Meantime the mountain-billows, to the clouds

In dreadful tumuli swell'd, surge above surge,
 Burst into chaos with tremendous roar,
 And anchor'd navies from their stations drive,
 Wild as the winds across the howling waste
 Of mighty waters. Now th' inflated wave
 Straining they scale, and now impetuous shoot
 Into the secret chambers of the deep.
 The wintry Baltic thundering o'er their head.
 Emerging thence again, before the breath
 Of full-exerted heaven they wing their course,
 And dart on distant coasts; if some sharp rock
 Or shoal insidious break not their career,
 And in loose fragments fling them floating round.

Nor less at land the loosen'd tempest reigns.
 The mountain thunders, and its sturdy sons
 Stoop to the bottom of the rocks they shade.
 Lone on the midnight steep, and all aghast,
 The dark wayfaring stranger beathless toils,
 And, often falling, climbs against the blast.
 Low waves the rooted forest, vex'd, and sheds
 What of its tarnish'd honours yet remain;
 Dash'd down, and scatter'd, by the tearing wind's
 Assiduous fury, its gigantic limbs.
 Thus struggling through the dissipated grove,
 The whirling tempest raves along the plain;
 And on the cottage thatch'd or lordly roof,
 Keen-fastening, shakes them to the solid base.
 Sleep frighted flies; and round the rocking dome,
 For entrance eager, howls the savage blast.
 Then too, they say, through all the burthen'd air,
 Long groans are heard, shrill sounds, and distant sighs,
 That, uttered by the Demon of the night,
 Warn the devoted wretch of woe and death.

Huge Up roar lords it wide. The clouds, commix'd
 With stars swift-gliding, sweep along the sky.
 All Nature reels. Till Nature's King, who oft
 Amid tempestuous darkness dwells alone,
 And on the wings of the careering wind
 Walks dreadfully serene, commands a claim;
 Then straight air, sea, and earth are hush'd at once.

As yet 'tis midnight deep. The weary clouds,
 Slow-meeting, mingle into solid gloom.
 Now, while the drowsy world lies lost in sleep,
 Let me associate with the serious Night,
 And contemplation, her sedate compeer:
 Let me shake off th' intrusive cares of day,
 And lay the meddling senses all aside.

Where now, ye lying vanities of life,
 Ye ever-tempting, ever-cheating train!
 Where are you now? and what is your amount?
 Vexation, disappointment, and remorse.
 Sad, sickening thought? and yet deluded man,
 A scene of crude, disjointed visions past,
 And broken slumber, rises still resolved,
 With new-flush'd hopes, to run the giddy round.

Father of light and life! thou Good supreme!
 O teach me what is good! teach me Thyself!
 Save me from folly, vanity, and vice,
 From every low pursuit; and feed my soul
 With knowledge, conscious peace, and virtue pure,—
 Sacred, substantial, never-fading bliss!

The keener tempests come: and fuming dun
 From all the livid East or piercing North,
 Thick clouds ascend; in whose capacious womb
 A vapoury deluge lies, to snow congeal'd,
 Heavy they roll their fleecy world along,
 And the sky saddens with the gather'd storm.
 Through the hush'd air the whitening shower descends,
 At first thin wavering; till at last the flakes
 Fall broad and wide and fast, dimming the day
 With a continual flow. The cherish'd fields
 Put on their winter-robe of purest white.
 'Tis brightness all; save where the new snow melts
 Along the mazy current. Low the woods
 Bow their hoar head; and, ere the languid Sun
 Faint from the West emits his evening ray,
 Earth's universal face, deep hid, and chill,
 Is one wild dazzling waste, that buries wide
 The works of man. Drooping, the labourer-ox
 Stands cover'd o'er with snow, and then demands
 The fruit of all his toil. The fowls of heaven,
 Tamed by the cruel season, crowd around
 The winnowing store, and claim the little boon

(1) "O! thou who givest sustenance to the world, thou sole mover of all, thou who restrainest sinners; who pervadest yon great luminary, who appearest as the Son of the Creator; hide thy dazzling beams and expand thy spiritual brightness, that I may view thy most auspicious, most glorious real form. OM Remember me, divine Spirit! OM Remember my deeds! That all-pervading Spirit, that Spirit which gives light to the visible sun, even the same in kind am I, though infinitely distant in degree. Let my soul return to the immortal Spirit of God and then let my body, which ends in ashes, return to dust! O Spirit, who pervadest fire, lead us in a straight path to the riches of beatitude! Thou, O God, possessest all the treasures of knowledge: remove each foul taint from our souls; we continually approach thee with highest praise and the most fervid adorations!"—
 Fragments from the Vedas, translated by Sir W Jones (*Works* vol. vi. page 425)

WINTER.

Which Providence assigns them. One alone,
The redbreast, sacred to the household gods,
Wisely regardful of th' embroiling sky,
In joyless fields and thorny thickets leaves
His shivering mates, and pays to trusted man
His annual visit. Half-afraid, he first
Against the window beats ; then brisk alights
On the warm hearth ; then, hopping o'er the floor,
Eyes all the smiling family askance,
And pecks, and starts, and wonders where he is :
'Till more familiar grown, the table-crumbs
Attract his slender feet. The foodless wilds
Pour forth their brown inhabitants. The hare,
Though timorous of heart, and hard beset
By death in various forms,—dark snares, and dogs,
And more unpitying men,—the garden seeks,
Urged on by fearless want. The bleating kind
Eye the bleak heaven, and next the glistening earth,
With looks of dumb despair ; then, sad-dispers'd,
Dig for the wither'd herb through heaps of snow.

Now, shepherds, to your helpless charge be kind,
Baffle the raging year, and fill their pens
With food at will ; lodge them below the storm,
And watch them strict : for from the bellowing East
In this dire season, oft the whirlwind's wing
Sweeps up the burthen of whole wintry plains
In one wide waft, and o'er the hapless flocks,
Hid in the hollow of two neighbouring hills,
The billowy tempest whelms ; till, upward urg'd,
The valley to a shining mountain swells,
Tipp'd with a wreath high-curling in the sky.

As thus the snows arise and foul and fierce,
All Winter drives along the darken'd air ;
In his own loose-revolving fields the swain
Disaster'd stands ; sees other hills ascend,
Of unknown, joyless brow ; and other scenes,
Of horrid prospect, shag the trackless plain :
Nor finds the river, nor the forest, hid
Beneath the formless wild ; but wanders on
From hill to dale, still more and more astray ;
Impatient flouncing through the drifted heaps,
Stung with the thoughts of home. The thoughts of home
Rush on his nerves, and call their vigour forth
In many a vain attempt. How sinks his soul !
What black despair, what horror fills his heart,
When, for the dusky spot which Fancy feign'd
His tufted cottage rising through the snow,
He meets the roughness of the middle waste,

Far from the track, and blest abode of man ;
 While round him night resistless closes fast,
 And every tempest, howling o'er his head,
 Renders the savage wilderness more wild.
 Then throng the busy shapes into his mind,
 Of cover'd pits, unfathomably deep,¹
 A dire descent ! beyond the power of frost,
 Of faithless bogs ; of precipices huge,
 Smooth'd up with snow ; and what is land, unknown,
 What water, of the still unfrozen spring,
 In the loose marsh or solitary lake,
 Where the fresh fountain from the bottom boils.
 These check his fearful steps ; and down he sinks
 Beneath the shelter of the shapeless drift,
 Thinking o'er all the bitterness of death,
 Mix'd with the tender anguish Nature shoots
 Through the wrung bosom of the dying man,—
 His wife, his children, and his friends unseen.
 In vain for him th' officious wife prepares
 The fire fair-blazing, and the vestment warm ;
 In vain his little children, peeping out
 Into the mingling storm, demand their sire,
 With tears of artless innocence. Alas !
 Nor wife, nor children, more shall he behold,
 Nor friends, nor sacred home. On every nerve
 The deadly winter seizes ; shuts up sense ;
 And, o'er his inmost vitals creeping cold,
 Lays him along the snows a stiffen'd corse,
 Stretch'd out and bleaching in the northern blast.

Ah ! little think the gay licentious proud,
 Whom pleasure, power, and affluence surround ;
 They, who their thoughtless hours in giddy mirth,
 And wanton, often cruel, riot waste ;—
 Ah ! little think they, while they dance along,
 How many feel, this very moment, death
 And all the sad variety of pain :
 How many sink in the devouring flood,
 Or more devouring flame : how many bleed,
 By shameful variance betwixt man and man :
 How many pine in want and dungeon glooms ;
 Shut from the common air and common use
 Of their own limbs : how many drink the cup
 Of baleful grief, or eat the bitter bread
 Of misery : sore pierced by wintry winds,

(1) " God help thee, traveller, on thy journey far ;
 The wind is bitter keen,—the snow o'erlays,—
 The hidden pits, and dangerous hollow ways.
 And darkness will involve thee."—KIRKE WHITE.

How many shrink into the sordid hut
 Of cheerless poverty : how many shake
 With all the fiercer tortures of the mind,—
 Unbounded passion, madness, guilt, remorse ;
 Whence tumbled headlong from the height of life,
 They furnish matter for the tragic Muse :
 E'en in the vale, where wisdom loves to dwell,
 With Friendship, Peace, and Contemplation join'd
 How many, rack'd with honest passions, droop
 In deep retired distress ; how many stand
 Around the death-bed of their dearest friends,
 And point the parting anguish. Thought fond man
 Of these, and all the thousand nameless ills,
 That one incessant struggle render life,
 One scene of toil, of suffering, and of fate,
 Vice in his high career would stand appall'd,
 And heedless rambling Impulse learn to think ;
 The conscious heart of Charity would warm,
 And her wide wish Benevolence dilate ;
 The social tear would rise, the social sigh ;
 And into clear perfection, gradual bliss,
 Refining still, the social passions work.

And here can I forget the generous band,
 Who, touch'd with human woe, redressive search'd
 Into the horrors of the gloomy jail,¹
 Unpitied and unheard, where Misery moans,
 Where Sickness pines, where Thirst and Hunger burn,
 And poor Misfortune feels the lash of Vice ?
 While in the land of Liberty, the land
 Whose every street and public meeting glow
 With open freedom, little tyrants raged ;
 Snatch'd the lean morsel from the starving mouth ;
 Tore from cold wintry limbs the tatter'd weed ;
 E'en robb'd them of the last of comforts, Sleep ;
 The free-born Briton to the dungeon chain'd,
 Or, as the lust of cruelty prevail'd,
 At pleasure mark'd him with inglorious stripes ;
 And crush'd out lives, by secret barbarous ways,
 That for their country would have toil'd or bled.
 O great design ! If executed well,
 With patient care and wisdom-temper'd zeal.
 Ye sons of mercy ! yet resume the search ;
 Drag forth the legal monsters into light,
 Wrench from their hands Oppression's iron rod,

(1) The Jail Committee, in the year 1729 ; and besides that committee may be mentioned the names of John Howard, Mrs. Fry, and Godfrey Higgins. The last of these was the author of a strange book named the "Anacalypsis," a book which ill-fortune allowed him to publish ; yet he must be remembered with gratitude as one of the first reformers in lunatic asylums.

And bid the cruel feel the pains they give.
 Much still untouch'd remains ; in this rank age,
 Much is the patriot's weeding hand required.
 The toils of law,— what dark insidious men
 Have cumbrous added to perplex the truth,
 And lengthen simple justice into trade,—
 How glorious were the day that saw these broke,
 And every man within the reach of right!

By wintry famine roused, from all the tract
 Of horrid mountains which the shining Alps,
 And wavy Apennines, and Pyrenees,
 Branch out stupendous into distant lands ;
 Cruel as death, and hungry as the grave,
 Burning for blood, bony and gaunt and grim,
 Assembling wolves in raging troops descend,
 And, pouring o'er the country, bear along,
 Keen as the north-wind sweeps the glossy snow,
 All is their prize. They fasten on the steed,
 Press him to earth, and pierce his mighty heart.
 Nor can the bull his awful front defend,
 Or shake the murdering savages away.
 Rapacious, at the mother's throat they fly,
 And tear the screaming infant from her breast.
 The godlike face of man avails him nought.
 Even beauty, force divine ! at whose bright glance
 The generous lion stands in soften'd gaze,
 Here bleeds, a hapless undistinguish'd prey.
 But if, appris'd of the severe attack,
 The country be shut up, lured by the scent,
 On churchyards drear (inhuman to relate !)
 The disappointed prowlers fall, and dig
 The shrouded body from the grave ; o'er which,
 Mix'd with foul shades and frightened ghosts, they howl.

Among those hilly regions where, embraced
 In peaceful vales the happy Grisons dwell ;
 Oft, rushing sudden from the loaded cliffs,
 Mountains of snow their gathering terrors roll.
 From steep to steep, loud-thundering down they come,
 A wintry waste in dire commotion all ;
 And herds, and flocks, and travellers, and swains,
 And sometimes whole brigades of marching troops,
 Or hamlets sleeping in the dead of night,
 Are deep beneath the smothering ruin whelm'd.

Now, all amid the rigours of the year,
 In the wild depth of Winter, while without
 The ceaseless winds blow ice, be my retreat,
 Between the groaning forest and the shore,

Beat by the boundless multitude of waves,
 A rural, shelter'd, solitary scene;
 Where ruddy fire and beaming tapers join
 To cheer the gloom. There studious let me sit,
 And hold high converse with the mighty dead;
 Sages of ancient time, as gods revered,
 As gods beneficent, who bless'd mankind
 With arts, with arms, and humanized a world.
 Roused at th' inspiring thought, I throw aside
 The long-lived volume; and, deep-musing, hail
 The sacred shades that, slowly-rising, pass
 Before my wondering eyes. First Socrates,
 Who, firmly good, in a corrupted state,
 Against the rage of tyrants single stood,
 Invincible; calm reason's holy law,
 That Voice of God within th' attentive mind,
 Obeying fearless or in life or death:
 Great moral teacher! wisest of mankind!
 Solon the next, who built his commonweal
 On equity's wide base; by tender laws
 A lively people curbing, yet undamp'd
 Preserving still that quick peculiar fire,
 Whence in the laurell'd field of finer arts,
 And of bold freedom, they unequall'd shone,
 The pride of smiling Greece and human-kind
 Lycurgus then, who bow'd beneath the force
 Of strictest discipline, severely wise,
 All human passions. Following him, I see
 As at Thermopylæ he glorious fell,
 The firm devoted chief,¹ who proved by deeds
 The hardest lesson which the other taught.
 Then Aristides lifts his honest front;
 Spotless of heart, to whom th' unflattering voice
 Of freedom gave the noblest name of "Just";
 Impure majestic poverty revered;
 Who, even his glory to his country's weal
 Submitting, swell'd a haughty rival's ² fame.
 Rear'd by his care, of soften ray appears
 Cimon sweet-soul'd; whose genius, rising strong,
 Shook off the load of young debauch; abroad
 The scourge of Persian pride, at home the friend
 Of every worth and every splendid art;
 Modest, and simple in the pomp of wealth.
 Then the last worthies of declining Greece,
 Late call'd to glory, in unequal t^h,
 Pensive appear. The fair Coriⁿ an boast,
 Timoleon, temper'd happy, miⁿ and firm,
 Who wept the brother while ' tyrant bled.

(1) Leonidas.

{ 2, Themistocles.

And, equal to the best, the Theban Pair,¹
 Whose virtues, in heroic concord join'd,
 Their country raised to freedom, empire, fame.
 He too, with whom Athenian honour sunk,
 And left a mass of sordid lees behind,
 Phocion the good ; in public life severe,
 To virtue still inexorably firm ;
 But when, beneath his low illustrious roof
 Sweet peace and happy wisdom smooth'd his brow,
 Not friendship softer was, nor love more kind.
 And he, the last of old Lyncurgus' sons,
 The generous victim to that vain attempt,
 To save a rotten state,—Agis, who saw
 Even Sparta's self to servile avarice sunk.
 The two Achaian heroes close the train.—
 Aratus, who awhile relumed the soul
 Of fondly lingering Liberty in Greece :
 And he, her darling, as her latest hope,
 The gallant Philopœmon, who to arms,
 Turn'd the luxurious pomp he could not cure ;
 Or, toiling in his farm, a simple swain ;
 Or, bold and skilful, thundering in the field.

Of rougher front, a mighty people come,
 A race of heroes, in whose virtuous times
 Which knew no stain, save that with partial flame,
 Their dearest country they too fondly loved :
 Her better Founder first, the Light of Rome,
 Numa, who soften'd her rapacious sons :
 Servius the king, who laid the solid base
 On which o'er earth the vast republic spread.
 Then the great consuls venerable rise :—
 The Public Father² who the Private quell'd,
 As on the dread tribunal, sternly sad :
 He, whom his thankless country could not lose,
 Camillus, only vengeful to her foes.
 Fabricius, scorner of all-conquering gold ;
 And Cincinnatus, awful from the plough,
 Thy willing victim,³ Carthage, bursting loose
 From all that pleading Nature could oppose,
 From a whole city's tears, by rigid Faith
 Imperious call'd and Honour's dire command :—
 Scipio, the gentle chief, humanely brave,
 Who soon the race of spotless glory ran,
 And, warm in youth, to the poetic shade
 With Friendship and Philosophy retired :
 Tully, whose powerful eloquence awhile
 Restrain'd the rapid fate of rushing Rome :
 Unconquer'd Cato, virtuous in extreme :

(1) Pe'oridas and El'aminondas. (2) Marcus Junius Brutus. (3) Regulus.

And thou, unhappy Brutus, kind of heart,
 Whose steady arm, by awful Virtue urged,
 Lifted the Roman steel against thy friend.
 Thousands besides the tribute of a verse
 Demand; but who can count the stars of heaven?
 Who sing their influence on this lower world?

Behold, who yonder comes in sober state,
 Fair, mild, and strong; as is a vernal sun!
 'Tis Phœbus' self, or else the Mantuan swain;
 Great Homer too appears, of daring wing,
 Parent of song! and equal by his side,
 The British Muse: join'd hand in hand they walk,
 Darkling, full up the middle steep to Fame
 Nor absent are those shades, whose skilful touch
 Pathetic drew th' impassion'd heart, and charm'd
 Transported Athens with the moral scene;
 Nor those who, tuneful, waked th' enchanting lyre.

First of your kind! society divine!
 Still visit thus my nights, for you reserved,
 And mount my soaring soul to thoughts like ours.
 Silence, thou lonely power! the door be thine;
 See on the hallow'd hour that none intrude,
 Save a few chosen friends, who sometimes deign
 To bless my humble roof, with sense refined,
 Learning digested well, exalted faith,
 Unstudied wit, and humour ever gay.
 Or from the Muses' hill will Pope descend,
 To raise the sacred hour, to bid it smile,
 And with the social spirit warm the heart;
 For though not sweeter his own Homer sings,
 Yet it his life the more endearing song.

Where art thou, Hammond? thou, the darling pride,
 The friend and lover, of the tuneful throng!
 Ah! why, dear youth, in all the blooming prime
 Of vernal genius, where disclosing fast
 Each active worth, each manly virtue lay,
 Why wert thou ravish'd from our hope so soon?
 What now avails that noble thirst of fame
 Which stung thy fervent breast, that treasured store
 Of knowledge early gain'd, that eager zeal
 To serve thy country, glowing in the band
 Of youthful Patriots who sustain her name?
 What now, alas! that life-diffusing charm
 Of sprightly wit, that rapture for the Muse,
 That heart of friendship, and that soul of joy,
 Which bade with softest light thy virtues smile?

Ah ! only show'd, to check our fond pursuits,
And teach our humbled hopes that life is vain !

Thus in some deep retirement would I pass
The winter-glooms, with friends of pliant soul,
Or blithe, or solemn, as the theme inspired ;
With them would search, if Nature's boundless frame
Was call'd late-rising from the void of night,
Or sprung eternal from th' eternal Mind ;
Its life, its laws, its progress, and its end.
Hence larger prospects of the beauteous whole
Would gradual open on our opening minds ;
And each diffusive harmony unite
In full perfection to th' astonish'd eye.
Then would we try to scan the moral world,
Which, though to us it seems embroil'd, moves on
In higher order, fitted, and empell'd,
By Wisdom's finest hand, and issuing all
In general good. The sage Historic Muse
Should next conduct us through the deeps of time :
Show us how empire grew, declined, and fell,
In scatter'd states ; what makes the nations smile,
Improves their soil, and gives them double suns ;
And why they pine beneath the brightest skies,
In Nature's richest lap. As thus we talk'd,
Our hearts would burn within us, would inhale
That portion of divinity, that ray
Of purest heaven, which lights the public soul
Of patriots and of heroes. But if doom'd,
In powerless humble fortune, to repress
These ardent risings of the kindling soul,
Then, even superior to ambition, we
Would learn the private virtues ; how to glide,
Through shades and plains, along the smoothest stream
Of rural life : or, snatch'd away by Hope,
Through the dim spaces of futurity,
With earnest eye anticipate those scenes
Of happiness and wonder, where the mind,
In endless growth and infinite ascent,
Rises from state to state, and world to world.
But when with these the serious thought is foil'd,
We, shifting for relief, would play the shapes
Of frolic fancy ; and incessant form
Those rapid pictures, that assembled train
Of fleet ideas, never join'd before,
Whence lively Wit excites to gay surprise ;
Or folly-painting Humour, grave himself,
Calls Laughter forth, deep-shaking every nerve.

Meantime the village rouses up the fire,
While, well attested and as well believ'd,

Heard solemn, goes the goblin story round,
 Till superstitious horror creeps o'er all.
 Or, frequent in the sounding hall, they wake
 The rural gambol : rustic mirth goes round ;
 The simple joke that takes the shepherd's heart,
 Easily pleased ; the long, loud laugh, sincere ;
 The kiss, snatch'd hasty from the sidelong maid,
 On purpose guardless, or pretending sleep ;
 The leap, the slap, the haul ; and, shook to notes
 Of native music, the respondent dance.
 Thus jocund fleets with them the winter-night.

The city swarms intense. The public haunt,
 Full of each theme, and warm'd with mix'd discourse,
 Hums indistinct. The sons of riot flow
 Down the loose stream of false enchanted joy,
 To swift destruction. On the rankled soul
 The gaming fury falls ; and in one gulf
 Of total ruin, honour, virtue, peace,
 Friends, families, and fortune, headlong sink.
 Up springs the dance along the lighted dome,
 Mix'd and evolved a thousand sprightly ways.
 The glittering court effuses every pomp ;
 The circle deepens ; beam'd from gaudy robes,
 Tapers, and sparkling gems, and radiant eyes,
 A soft effulgence o'er the palace waves :
 While, a gay insent in his Summer shine,
 The fop, light-fluttering, spreads his mealy wings.

Dread o'er the scene, the ghost of Hamlet stalks,
 Othello rages, poor Monimia mourns ;
 And Belvidera pours her soul in love.
 Terror alarms the breast ; the comely tear
 Steals o'er the cheek. Or else the Comic Muse
 Holds to the world a picture of itself,
 And raises sly the fair impartial laugh.
 Sometimes she lifts her strain, and paints the scenes
 Of beauteous life ; whate'er can deck mankind,
 Or charm the heart, in generous Bevil ¹ show'd

O Thou, whose wisdom, solid, yet refined,
 Whose patriot-virtues, and consummate skill
 To touch the finer springs that move the world,
 Join'd to whate'er the Graces can bestow,
 And all Apollo's animating fire,
 Give thee with pleasing dignity to shine
 At once the guardian, ornament, and joy
 Of polish'd life ; permit the Rural Muse,

(1) A character in the *Conscious Lovers*, written by Steele,

O Chesterfield, to grace with thee her song
 Ere to the shades again she humbly flies,
 Indulge her fond ambition, in thy train,
 (For every Muse has in thy train a place,)
 To mark thy various full-accomplish'd mind ;
 To mark that spirit which, with British scorn,
 Rejects th' allurements of corrupted power ;
 That elegant politeness which excels,
 Even in the judgment of presumptuous France,
 The boasted manners of her shining court ;
 That wit, the vivid energy of sense,
 The truth of Nature, which, with Attic point,
 And kind, well-temper'd satire, smoothly keen,
 Steals through the soul, and without pain corrects.
 Or, rising thence with yet a brighter flame,
 O let me hail thee on some glorious day,
 When to the listening senate ardent crowd
 Britannia's sons to hear her pleaded cause !
 Then dress'd by thee, more amiably fair,
 Truth the soft robe of mild Persuasion wears ;
 Thou to assenting Reason givest again
 Her own enlighten'd thoughts^c ; call'd from the heart,
 Th' obedient Passions on thy voice attend ;
 And even reluctant Party feels awhile
 Thy gracious power ; as through the varied maze
 Of eloquence, now smooth, now quick, now strong,
 Profound and clear, you roll the copious flood.

To thy loved haunt return, my happy Muse :
 For now, behold, the joyous winter days,
 Frosty succeed ; and through the blue serene,
 For sight too fine, th' ethereal nitre flies,
 Killing infectious damps, and the spent air
 Storing afresh with elemental life.
 Close crowds the shining atmosphere, and binds
 Our strengthen'd bodies in its cold embrace,
 Constrigent ; feeds and animates our bloods ;
 Refines our spirits through the new-strung nerves
 In swifter sallies darting to the brain,
 Where sits the soul, intense, collected, cool,
 Bright as the skies, and as the season keen.
 All Nature feels the renovating force
 Of Winter, only to the thoughtless eye
 In ruin seen. The frost-concocted glebe
 Draws in abundant vegetable soul,
 And gathers vigour for the coming year.
 A stronger glow sits on the lively cheek
 Of ruddy Fire : and luculent along
 The purer rivers flow ; their sullen deeps,

Transparent, open to the shepherd's gaze,
And murmur hoarser at the fixing frost.

What art thou, Frost? and whence are thy keen stores
Derived, thou secret all-invading power,
Whom even th' illusive fluid cannot fly?
Is not thy potent energy, unseen,
Myriads of little salts, or hook'd, or shaped
Like double wedges, and diffused immense
Through water, earth, and ether? Hence at eve,
Steam'd eager from the red horizon round,
With the fierce rage of Winter deep suffus'd,
An icy gale, oft shifting o'er the pool
Breathes a blue film, and in its mid career
Arrests the bickering stream. The loosen'd ice,
Let down the flood and half dissolved by day,
Rustles no more; but to the sedgy bank
Fast grows, or gathers round the pointed stone,
A crystal pavement, by the breath of heaven
Cemented firm; till, seiz'd from shore to shore,
The whole imprison'd river growls below.
Loud rings the frozen earth, and hard reflects
A double noise; while, at his evening watch,
The village-dog deters the nightly thief;
The heifer lows; the distant waterfall
Swells in the breeze; and with the hasty tread
Of traveller the hollow-sounding plain
Shakes from afar. The full ethereal round,
Infinite worlds disclosing to the view,
Shines out intensely keen; and, all one cope
Of starry glitter, glows from pole to pole.
From pole to pole the rigid influence falls,
Through the still night, incessant, heavy, strong,
And seizes Nature fast. It freezes on,
Till Morn, late-rising o'er the drooping world,
Lifts her pale eye unjoyous. Then appears
The various labour of the silent night:
Prone from the dripping eave, and dumb cascade,
Whose idle torrents only seem to roar,
The pendant icicle; the frost-work fair,
Where transient hues and fancied figures rise;
Wide-spouted o'er the hill, the frozen brook,
A livid tract, cold-gleaming on the morn;
The forest bent beneath the plummy wave;
And by the frost refined the whiter snow,
Incrusted hard, and sounding to the tread
Of early shepherd, as he pensive seeks
His pining flock, or from the mountain top,
Pleas'd with the slippery surface, swift descends.

On blithsome follies bent, the youthful swains,
 While every work of man is laid at rest,
 Fond o'er the river crowd, in various sport
 And revelry dissolved; where mixing glad,
 Happiest of all the train, the raptured boy
 Lashes the whirling top. Or, where the Rhine
 Branch'd out in many a long canal extends,
 From every province swarming, void of care,
 Batavia rushes forth; and as they sweep,
 On sounding skates, a thousand different ways,
 In circling poise, swift as the winds, along,
 The then gay land is madden'd all to joy.
 Nor less the northern courts, wide o'er the snow
 Pour a new pomp. Eager, on rapid sleds,¹
 Their vigorous youth in bold contention wheel
 The long-resounding course. Meantime to raise
 The manly strife, with highly blooming charms,
 Flush'd by the season, Scandinavia's dames
 Or Russia's buxom daughters glow around.

Pure, quick, and sportful, is the wholesome day;
 But soon elapsed. The horizontal Sun,
 Broad o'er the South hangs at his utmost noon,
 And ineffectual strikes the gelid cliff:
 His azure gloss the mountain still maintains
 Nor feels the feeble touch. Perhaps the vale
 Relents a while to the reflected ray;
 Or from the forest falls the cluster'd snow,
 Myriads of gems, that in the waving gleam
 Gay twinkle as they scatter. Thick around
 Thunders the sport of those who, with the gun,
 And dog impatient bounding at the shot,
 Worse than the season, desolate the fields,
 And, adding to the ruins of the year,
 Distress the footed or the feather'd game.

But what is this? Our infant Winter sinks,
 Divested of his grandeur, should our eye
 Astonish'd shoot in to the Frigid Zone,
 Where for relentless months continual Night
 Holds o'er the glittering waste her starry reign
 There through the prison of unbounded wilds,
 Barr'd by the hand of Nature from escape,
 Wide roams the Russian exile. Nought around
 Strikes his sad eye, but deserts lost in snow;
 And heavy-loaded groves: and solid floods,

(1) "Sleds." I may remark it as a curious fact in the history of the English language, that, among other words, this has been banished our modern English as a provincialism, while it is retained by America as a legitimate word.

That stretch, athwart the solitary vast,
 Their icy horrors to the Frozen Main :
 And cheerless towns far-distant, never bless'd,
 Save when its annual course in
 Bends to the golden coast of rich Cathay,¹
 With news of human-kind. Yet there life glows ;
 Yet cherish'd there, beneath the shining waste,
 The furry nations harbour :—Tipp'd with jet,
 Fair ermines, spotless as the snows they press ;
 Sables of glossy black ; and, dark-embrown'd,
 Or beauties freak'd with many a mingled hue,
 Thousands besides, the costly pride of courts.
 There, warm together press'd, the trooping deer
 Sleep on the new-fall'n snows ; and, scarce his head
 Raised o'er the heapy wreath, the branching elk
 Lies slumbering sullen in the white abyss.
 The ruthless hunter wants nor dog nor toils,
 Nor with the dread of sounding blows he drives
 The fearful flying race ; with ponderous clubs.
 As weak against the mountain-heaps they push
 Their beating breast in vain, and piteous bray,
 He lays them quivering on the ensanguined snows,
 And with loud shouts rejoicing bears them home.
 There through the piny forest half-absorb'd,
 Rough tenant of these shades, the shapeless bear,
 With dangling ice all horrid, stalks forlorn,
 Slow-paced, and sourer as the storms increase :
 He makes his bed beneath th' inclement drift,
 And, with stern patience, scorning weak complaint,
 Hardens his heart against assailing want.

Wide o'er the spacious regions of the North,
 That see böotes urge his tardy wain,
 A boisterous race, by frosty Caurus² pierced,
 Who little pleasure know and fear no pain.
 Prolific swarm. They once relumed the flame
 Of lost mankind in polish'd slavery sunk,
 Drove martial horde on horde,³ with dreadful sweep
 Resistless rushing o'er th' enfeebled South,
 And gave the vanquish'd world another form.
 Not such the sons of Lapland : wisely they
 Despise th' insensate barbarous trade of war ;
 They ask no more than simple Nature gives,
 They love their mountains and enjoy their storms.
 No false desires, no pride-created wants,
 Disturb the peaceful current of their time,
 And through the restless, ever-tortured maze
 Of pleasure or ambition bid it rage.

(1) The old name for China.

(2) The North-West wind.

(3) The wandering Scythian Clans.

Their rein-deer from their riches. These their tents,
 Their robes, their beds, and all their homely wealth
 Supply, their wholesome fare and cheerful cups.
 Obsequious at their call, the docile tribe
 Yield to the sled their necks, and whirl them swift
 O'er hill and dale, heap'd into one expanse
 Of marbled snow, or far as eye can sweep
 With a blue crust of ice unbounded glazed.
 By dancing meteors then, that ceaseless shake
 A waving blaze refracted o'er the heavens,
 And vivid moons, and stars that keener play
 With doubled lustre from the radiant waste,
 Even in the depth of Polar Night they find
 A wondrous day; enough to light the chase,
 Or guide their daring steps to Finland fairs.
 Wish'd Spring returns; and from the hazy South,
 While dim Aurora slowly moves before
 The welcome Sun, just verging up at first,
 By small degrees extends the swellings curve;
 Till, seen at last for gay rejoicing months,
 Still, round and round, his spiral course he winds,
 And, as he nearly dips his flaming orb,
 Wheels up again, and re-ascends the sky.
 In that glad season, from the lakes and floods,
 Where pure Niemi's ¹ fairy mountains rise,
 And fringed with roses ² Tenglio rolls his stream,
 They draw the copious fry. With these, at eve,
 They cheerful-loaded to their tents repair,
 Where, all day long in useful cares employ'd,
 Their kind unblemish'd wives the fire prepare.
 Thrice happy race! by poverty secured
 From legal plunder and rapacious power;
 In whom fell interest never yet has sown
 The seeds of vice; whose spotless swains ne'er knew
 Injurious deed, nor, blasted by the breath
 Of faithless love, their blooming daughters woe.

Still pressing on, beyond Tornêa's lake,
 And Hecla flaming through a waste of snow,
 And farthest Greenland, to the pole itself,
 Where, failing gradual, life at length goes out,

(1) Maupertuis, in his book on the "Figure of the Earth," after having described the beautiful Lake and Mountain of Niemi in Lapland, says,—
 "From this height we had opportunity several times to see those vapours rise from the Lake which the people of the country call Haltios, and which they deem to be the guardian spirits of the mountains. We had been frightened with stories of bears that haunted this place, but saw none. It seemed rather a place of resort for fairies and genii, than bears."

(2) The same author observes,—"I was surprised to see upon the banks of this river (the Tenglio) roses of as lively a red as any that are in our gardens."

The Muse expands her solitary flight ;
 And, hovering o'er the wild stupendous scene,
 Beholds new seas beneath another sky.¹
 Throned in his palace of cerulean ice,
 Here Winter holds his unrejoicing court ;
 And through his airy hall the loud misrule
 Of driving tempest is for ever heard.
 Here the grim tyrant meditates his wrath,
 Here arms his winds with all-subduing frost ;
 Moulds his fierce hail, and treasures up his snows,
 With which he now oppresses half the globe.

Thence winding eastward to the Tartar's coast,
 She sweeps the howling margin of the main ;
 Where, undissolving, from the first of time,
 Snows swell on snows amazing to the sky ;
 And icy mountains high, on mountains piled,
 Seem to the shivering sailor from afar,
 Shapeless and white, an atmosphere of clouds.
 Projected huge and horrid o'er the surge,
 Alps frown on Alps ; or, rushing hideous down,
 As if old Chaos was again return'd,
 Wide-rend the deep, and shake the solid pole.
 Ocean itself no longer can resist
 The binding fury ; but, in all its rage
 Of tempest taken by the boundless frost,
 Is many a fathom to the bottom chain'd,
 And bid to roar no more : a bleak expanse,
 Shagg'd o'er with wavy rocks, cheerless, and void
 Of every life, that from the dreary months
 Flies conscious southward. Miserable they
 Who, here entangled in the gathering ice,
 Take their last look of the descending sun ;
 While, full of death, and fierce with tenfold frost,
 The long, long night, incumbent o'er their heads,
 Falls horrible ! Such was the Briton's fate²
 As with first prow, (what have not Britons dared ?)
 He for the passage sought, attempted since
 So much in vain, and seeming to be shut
 By jealous Nature with eternal bars.
 In these fell regions, in Arzina caught,
 And to the stony deep his idle ship
 Immediate seal'd, he, with his hapless crew
 Each full-exerted at his several task,
 Froze into statues ; to the cordage glued
 The sailor, and the pilot to the helm.

Hard by these shores, where scarce his freezing stream
 Rolls the wild Oby, live the last of men ;

(1) The other hemisphere. (2) Sir Hugh Willoughby, sent by Queen Elizabeth to discover the North East Passage.

And, half enliven'd by the distant sun,
 That rears and ripens man, as well as plants,
 Here human nature wears its rudest form.
 Deep from the piercing season sunk in caves ;
 Here by dull fires, and with unjoyous cheer,
 They waste the tedious gloom. Immersed in furs,
 Doze the gross race : nor sprightly jest, nor song,
 Nor tenderness they know ; nor aught of life,
 Beyond the kindred bears that stalk without :
 Till Morn at length, her roses drooping all,
 Sheds a long twilight brightening o'er their fields,
 And calls the quiver'd savage to the chase.

What cannot active government perform,
 New-moulding man ? Wide-stretching from these shores,
 A people savage from remotest time,
 A huge neglected empire, one vast mind,
 By heaven inspired, from Gothic darkness call'd.
 Immortal Peter ! first of monarchs ! He
 His stubborn country tamed,—her rocks, her fens,
 Her floods, her seas, her ill-submitting sons ;
 And while the fierce barbarian he subdued,
 To more exalted soul he raised the man.
 Ye shades of ancient heroes, ye who toil'd
 Through long successive ages to build up
 A labouring plan of state, behold at once
 The wonder done ! Behold the matchless prince,
 Who left his native throne, where reign'd till then
 A mighty shadow of unreal power ;
 Who greatly spurn'd the slothful pomp of courts ;
 And, roaming every land, in every port
 His sceptre laid aside, with glorious hand
 Unwearied plying the mechanic tool ;
 Gather'd the seeds of trade, of useful arts,
 Of civil wisdom, and of martial skill.
 Charged with the stores of Europe, home he goes :
 Then cities rise amid th'illumin'd waste ;
 O'er joyless deserts smiles the rural reign ;
 Far-distant flood to flood is social join'd ;
 Th' astonish'd Euxine hears the Baltic roar ;
 Proud navies ride on seas that never foam'd
 With daring keel before ; and armies stretch
 Each way their dazzling files, repressing here
 The frantic Alexander of the North,
 And awing there stern Othman's shrinking sons.
 Sloth flies the land, and Ignorance, and Vice,
 Of old dishonour proud : it glows around,
 Taught by the royal hand that roused the whole,
 One scene of arts, of arms, of rising trade ;
 For what his wisdom plann'd, and power enforced,
 More potent still, his great example show'd.

Muttering, the winds at eve, with blunted point,
 Blow hollow-blustering from the South. Subdued,
 The frost resolves into a trickling thaw.
 Spotted the mountains shine : loose sleet descends,
 And floods the country round. The rivers swell,
 Of bonds impatient. Sudden from the hills,
 O'er rocks and woods, in broad brown cataracts,
 A thousand snow-fed torrents shoot at once ;
 And, where they rush, the wide-resounding plain
 Is left one slimy waste. Those sullen seas,
 That wash th' ungenial Pole, will rest no more
 Beneath the shackles of the mighty North,
 But, rousing all their waves, resistless heave.
 And, hark ! the lenthening roar continuous runs
 Athwart the rifted deep : at once it bursts,
 And piles a thousand mountains to the clouds.
 Ill fares the dark, with trembling wretches charged,
 That, toss'd amid the floating fragments, moors
 Beneath the shelter of an icy isle,
 While night o'erwhelms the sea, and Horror looks
 More horrible. Can human force endure
 Th' assembled mischiefs that besiege them round ?—
 Heart-gnawing hunger, fainting weariness,
 The roar of winds and waves, the crush of ice,
 Now ceasing, now renew'd with louder rage,
 And in dire echoes bellowing round the main.
 More to embroil the deep, Leviathan
 And his unwieldy train in dreadful sport
 Tempest the loosen'd brine ; while through the gloom,
 Far from the bleak inhospitable shore,
 Loading the winds, is heard the hungry howl
 Of famish'd monsters, there awaiting wrecks.
 Yet Providence, that ever-waking Eye,
 Looks down with pity on the feeble toil
 Of mortals lost to hope, and lights them safe,
 Through all this dreary labyrinth of fate.

'Tis done ! dread Winter spreads his latest glooms,
 And reigns tremendous o'er the conquer'd year.
 How dead the vegetable kingdom lies !
 How dumb the tuneful ! Horror wide extends
 His desolate domain. Behold, fond man !
 See here thy pictured life : pass some few years,
 Thy flowering-Spring, thy Summer's ardent strenth,
 Thy sober Autumn fading into age,
 And pale concluding Winter comes at last,
 And shuts the scene. Ah ! whither now are fled
 Those dreams of greatness, those unsolid hopes
 Of happiness, those longings after fame,
 Those restless cares, those busy bustling days,

Those gay-spent festive nights those veering thoughts,
Lost between good and ill, that share, thy life ?
All now are vanish'd ! Virtue sole-survives,
Immortal, never-failing friend of man,
His guide to happiness on high.—And see !
'Tis come, the glorious morn, the second birth
Of heaven and earth ! Awakening Nature hears
The new-creating Word, and starts to life,
In every heighten'd form, from pain and death
For ever free. The great eternal scheme,
Involving all, and in a perfect whole
Uniting, as the prospect wider spreads,
To Reason's eye refined clears up apace.
Ye vainly wise ! ye blind presumptuous ! now,
Confounded in the dust, adore that Power
And Wisdom oft arraign'd. See now the cause
Why unassuming worth in secret lived,
And died neglected ; why the good man's share
In life was gall and bitterness of soul ;
Why the lone widow and her orphans pined
In starving solitude ; while Luxury,
In palaces lay straining her low thought,
To form unreal wants ; why heaven-born Truth,
And Moderation fair, wore the red marks
Of Superstition's scourge : why licensed Pain,
That cruel spoiler, that embosom'd foe,
Imbitter'd all our bliss. Ye good distress'd !
Ye noble few, who here unbending stand
Beneath life's pressure, yet bear up awhile,
And what your bounded view, which only saw
A little part, deem'd evil is no more :
The storms of Wintry Time will quickly pass,
And one unbounded Spring encircle all.

THE
PASSAGE OF THE RED SEA.

WITH heat o'erlabour'd and the length of way,
On Ethan's beach the bands of Israel lay.
Twas silence all, the sparkling-sands along;
Save where the locust trill'd her feeble song,
Or blended soft in drowsy cadence fell
The wave's low whisper or the camel's bell.—
'Twas silence all!—the flocks for shelter fly
Where, waving light, the acacia shadows lie;
Or where, from far, the flattering vapours make
The noon-tide semblance of a misty lake:
While the mute swain, in careless safety spread,
With arms enfolded, and dejected head,
Dreams o'er his wondrous call, his lineage high,
And, late reveal'd, his children's destiny.—
For, not in vain in thralldom's darkest hour,
Had sped from Amram's sons the word of power;
Nor fail'd the dreadful wand, whose god-like sway
Could lure the locust from her airy way;
With reptile war assail their proud abodes,
And mar the giant pomp of Egypt's Gods,
Oh helpless Gods! who nought avail'd to shield
From fiery rain your Zoan's favour'd field!—
Oh helpless Gods! who saw the curdled blood
Taint the pure lotus of your ancient flood,
And four-fold night the wondering earth enchain,
While Memnon's orient harp was heard in vain!—
Such musings held the tribes, till now the west
With milder influence on their temples prest;
And that portentous cloud which, all the day,
Hung its dark curtain o'er their weary way,
(A cloud by day, a friendly flame by night,)
Roll'd back its misty veil, and kindled into light!—
Soft fell the eve:—But, ere the day was done,
Tall waving banners streak'd the level sun;
And wide and dark along the horizon red,
In sundy surge the rising desert spread.—
“Mark, Israel, mark!”—On that strange sight intent,
In breathless terror, every eye was bent;
And busy faction's fast-increasing hum,
And female voices shriek, “They come, they come!”
They come, they come! in scintillating show

O'er the dark mass the brazen lances glow ;
 And sandy clouds in countless shapes combine,
 As deepens or extends the long tumultuous line ;—
 And fancy's keener glance ev'n now may trace
 The threatening aspects of each mingled race :
 For many a coal-black tribe and cany spear,
 The hireling guards of Misraim's throne, were there.
 From distant Cush they troop'd, a warrior train,
 Siwah's green isle and Sennaar's marly plain :
 On either wing their fiery coursers check
 The parch'd and sinewy sons of Amalek :
 While close behind, inured to feast on blood,
 Deck'd in Behemoth's spoils, the tall Shangalla strode.
 'Mid blazing helms and bucklers rough with gold
 Saw ye how swift the scythed chariots roll'd ?
 Lo, these are they whom, lords of Afric's fates,
 Old Thebes hath pour'd through all her hundred gates,
 Mother of armies !—How the emeralds glow'd,
 Where, flush'd with power and vengeance, Pharaoh rode !
 And stoled in white, those brazen wheels before,
 Osiris' ark his swarthy wizards bore ;
 And still responsive to the trumpet's cry
 The priestly sistrum murmur'd—Victory !—
 Why swell these shouts that rend the desert's gloom ?
 Whom come ye forth to combat ?—warriors, whom ?—
 These flocks and herds—this faint and weary train—
 Red from the scourge and recent from the chain ?—
 God of the poor, the poor and friendless save !
 Giver and Lord of freedom, help the slave !—
 North, south, and west, the sandy whirlwinds fly,
 The circling horns of Egypt's chivalry.
 On earth's last margin thron'd the weeping train :
 Their cloudy guide moves on :—“ And must we swim the main
 'Mid the light spray their snorting camels stood,
 Nor bathed a fetlock in the nauseous flood—
 He comes—their leader comes !—the man of God
 O'er the wide waters lifts his mighty rod,
 And onward treads—The circling waves retreat,
 In hoarse deep murmurs, from his holy feet ;
 And the chased surges, inly roaring, show
 The hard wet sand, and coral hills below.
 With limbs that falter, and with hearts that swell,
 Down, down they pass—a steep and slippery dell—
 Around them rise, in pristine chaos hurl'd,
 The ancient rocks, the secrets of the world ;
 And flowers that blush beneath the ocean green,
 And caves, the sea-calves' low-roof'd haunt are seen.
 Down, safely down the narrow pass they tread
 The beetling waters storm above their head :
 While far behind retires the sinking day,

And fades on Edom's hills its latest ray.

Yet not from Israel fled the friendly light,
Or dark to them, or cheerless came the night.
Still in their van, along that dreadful road,
Blazed broad and fierce the brandish'd torch of God.
Its meteor glare a tenfold lustre gave
On the long mirror of the rosy wave :
While its blest beams a sunlike heat supply,
Warm every cheek, and dance in every eye—
To them alone—for Misraim's wizard train
Invoke for light their monster-gods in vain :
Clouds heap'd on clouds their struggling sight confine,
And tenfold darkness broods above their line.
Yet on they fare by reckless vengeance led,
And range unconscious through the ocean's bed :
Till midway now—that strange and fiery form
Show'd his dread visage lightening through the storm ;
With withering splendour blasted all their might,
And break their chariot-wheels, and marr'd their coursers' flight.
“ Fly, Misraim, fly ! ”—The ravenous floods they see,
And fiercer than the floods, the Deity.
“ Fly, Misraim, fly ! ”—From Edom's coral strand
Again the prophet stretch'd his dreadful wand :—
With one wild crash the thundering waters sweep,
And all is waves—a dark and lonely deep—
Yet o'er those lonely waves such murmurs past,
As mortal wailing swell'd the nightly blast :
And strange and sad the whispering breezes bore
The groans of Egypt to Arabia's shore.

Oh ! welcome came the morn, where Israel stood
In trustless wonder by th' avenging flood !
Oh ! welcome came the cheerful morn, to show
The drifted wreck of Zoan's pride below ;
The mangled limbs of men—the broken car—
A few sad relics of a nation's war :
Alas, how few !—Then, soft as Elim's well,
The precious tears of new-born freedom fell.
And he, whose harden'd heart alike had borne
The house of bondage and th' oppressor's scorn,
The stubborn slave, by hope's new beams subdued,
In faltering accents sobb'd his gratitude—
Till kindling into warmer zeal, around
The virgin timbrel waked its silver sound :
And in fierce joy, no more by doubt suppress'd,
The struggling spirit throb'd in Miriam's breast.
She, with bare arms, and fixing on the sky
The dark transparence of her lucid eye,
Pour'd on the winds of heaven her wild sweet harmony.
“ Where now,” she sang, “ the tall Egyptian spear ?
On's sun-like shield, and Zoan's chariot, where ?

Above their ranks the welming waters spread.
Shout, Israel, for the Lord hath triumphed !"—
And every pause between as Miriam sang,
From tribe to tribe the martial thunder rang,
And loud and far their stormy chorus spread,—
“ Shout, Israel the Lord hath triumphed !”—

THE
HISTORY OF RASSELAS,
PRINCE OF ABYSSINIA.

CHAPTER. 1.

DISCRIPTION OF A PALACE IN A VALLEY

Ye who listen with credulity to the whispers of fancy, and pursue with eagerness the phantoms of hope; who expect that age will perform the promises of youth, and that the deficiencies of the present day will be supplied by the morrow; attend to the history of Rasselas, prince of Abyssinia.

Rasselas was the fourth son of the mighty emperor, in whose dominions the Father of Waters begins his course; whose bounty pours down the streams of plenty, and scatters over half the world the harvests of Egypt.

According to the custom which has descended from age to age among the monarchs of the torrid zone, Rasselas was confined in a private palace, with the other sons and daughters of Abyssinian royalty, till the order of succession should call him to the throne.

The place, which the wisdom or policy of antiquity had destined for the residence of the Abyssinian princes, was a spacious valley in the kingdom of Ambara, surrounded on every side by mountains, of which the summits overhang the middle part. The only passage by which it could be entered, was a cavern that passed under a rock, of which it has long been disputed whether it was the work of nature or of human industry. The outlet of the cavern was concealed by a thick wood, and the mouth which opened into the valley was closed with gates of iron, forged by the artificers of ancient days, so massy that no man without the help of engines could open or shut them.

From the mountains on every side, rivulets descended that filled all the valley with verdure and fertility, and formed a lake in the middle, inhabited by fish of every species, and frequented by every fowl whom nature has taught to dip the wing in water. This lake discharged its superfluities by a stream which entered a dark cleft of the mountain on the northern side, and fell with dreadful noise from precipice to precipice till it was heard no more.

The sides of the mountains were covered with trees, the banks of the brooks were diversified with flowers; every blast shook spices from the rocks, and every month dropped fruits upon the ground. All animals that bite the grass, or browse the shrub, whether wild or tame, wandered in this extensive circuit, secured from beasts of prey by the mountain, which confined them. On one part were flocks and herds feeding in the pastures, on another all the beasts of chase frisking in the lawns;

the sprightly kid was bounding on the rocks, the subtle monkey frolicking in the trees, and the solemn elephant reposing in the shade. All the diversities of the world were brought together, the blessings of nature were collected, and its evils extracted and excluded.

The valley, wide and fruitful, supplied its inhabitants with the necessities of life, and all delights and superfluities were added at the annual visit which the emperor paid his children, when the iron gate was opened to the sound of music; and during eight days every one that resided in the valley was required to propose whatever might contribute to make seclusion pleasant, to fill up the vacancies of attention, and lessen the tediousness of time. Every desire was immediately granted. All the artificers of pleasure were called to gladden the festivity; the musicians exerted the power of harmony, and the dancers showed their activity before the princes, in hope that they should pass their lives in this blissful captivity; to which those only were admitted whose performance was thought able to add novelty to luxury. Such was the appearance of security and delight which this retirement afforded, that they, to whom it was new, always desired that it might be perpetual; and as those, on whom the iron gate had once closed, were never suffered to return, the effect of long experience could not be known. Thus every year produced new schemes of delight, and new competitors for imprisonment.

The palace stood on an eminence raised about thirty paces above the surface of the lake. It was divided into many squares or courts, built with greater or less magnificence, according to the rank of those for whom they were designed. The roofs were turned into arches of massy stone, joined by a cement that grew harder by time, and the building stood from century to century deriding the solstitial rains and equinoctial hurricanes, without need of reparation.

This house, which was so large as to be fully known to none but some ancient officers who successively inherited the secrets of the place, was built as if suspicion herself had dictated the plan. To every room there was an open and secret passage, every square had a communication with the rest, either from the upper stories by private galleries, or by subterranean passages from the lower apartments. Many of the columns had unsuspected cavities, in which a long race of monarchs had deposited their treasures. They then closed up the opening with marble, which was never to be removed but in the utmost exigencies of the kingdom; and recorded their accumulations in a book which was itself concealed in a tower not entered but by the emperor, attended by the prince who stood next in succession.

CHAPTER 11.

THE DISCONTENT OF RASSELAS IN THE HAPPY VALLEY.

HERE the sons and daughters of Abyssinia lived only to know the soft vicissitudes of pleasure and repose, attended by all that were skilful to delight, and gratified with whatever the senses can enjoy. They wandered in gardens of fragrance, and slept in the fortress of security. Every art was practised to make them pleased with their own condi-

tion. The sages, who instructed them, told them of nothing but the miseries of public life, and described all beyond the mountains as regions of calamity, where discord was always raging, and where man preyed upon man. To heighten their opinion of their own felicity, they were daily entertained with songs, the subject of which was the *happy valley*. Their appetites were excited by frequent enumerations of different enjoyments, and revelry and merriment was the business of every hour from the dawn of morning to the close of even.

These methods were generally successful; few of the princes had ever wished to enlarge their bounds, but passed their lives in full conviction that they had all within their reach that art or nature could bestow, and pitied those whom fate had excluded from this seat of tranquillity, as the sport of chance and the slaves of misery.

Thus they rose in the morning and lay down at night; pleased with each other and with themselves; all but Rasselas, who, in the twenty-sixth year of his age, began to withdraw himself from their pastimes and assemblies, and to delight in solitary walks and silent meditation. He often sat before tables covered with luxury, and forgot to taste the dainties that were placed before him; he rose abruptly in the midst of, the song, and hastily retired beyond the sound of music. His attendants observed the change, and endeavoured to renew his love of pleasure; he neglected their officiousness, repulsed their invitations, and spent day after day on the banks of rivulets sheltered with trees, where he sometimes listened to the birds in the branches, sometimes observed the fish playing in the stream, and anon cast his eyes upon the pastures and mountains filled with animals, of which some were biting the herbage, and some sleeping among the bushes. This singularity of his humour made him much observed. One of the sages, in whose conversation he had formerly delighted, followed him secretly, in hope of discovering the cause of his disquiet. Rasselas, who knew not that any one was near him, having for some time fixed his eyes upon the goats that were browsing among the rocks, began to compare their condition with his own.

"What," said he, "makes the difference between man, and all the rest of the animal creation? Every beast that strays beside me has the same corporeal necessities with myself; he is hungry and crops the grass, he is thirsty and drinks the stream, his thirst and hunger are appeased, he is satisfied and sleeps; he arises again and is hungry, he is again fed and is at rest. I am hungry and thirsty like him, but when thirst and hunger cease I am not at rest; I am, like him, pained with want, but am not, like him, satisfied with fulness. The intermediate hours are tedious and gloomy; I long again to be hungry that I may again quicken my attention. The birds peck the berries or the corn, and fly away to the groves, where they sit in seeming happiness on the branches, and waste their lives in tuning one unvaried series of sound. I likewise can call the lutanist and the singer, but the sounds that pleased me yesterday weary me to-day, and will grow yet more wearisome to-morrow. I can discover within me no power of perception which is not glutted with its proper pleasure, yet I do not feel myself delighted. Man surely has some latent sense for which this place affords no gratification; or

he has some desires distinct from sense which must be satisfied before can be happy."

After this he lifted up his head, and seeing the moon rising, walked towards the place. As he passed through the fields, and saw the animals around him, "Ye," said he, "are happy, and need not envy me that walk thus among you, burdened with myself; nor do I, ye gentle beings, envy your felicity; for it is not the felicity of man. I have many distresses from which ye are free; I fear pain when I do not feel it; I sometimes shrink at evils recollected, and sometimes start at evils anticipated. Surely the equity of Providence has balanced peculiar sufferings with peculiar enjoyments."

With observations like these the prince amused himself as he returned uttering them with a plaintive voice, yet with a look that discovered him to feel some complacency in his own perspicuity, and to receive some solace of the miseries of life, from consciousness of the delicacy with which he felt, and the eloquence with which he bewailed them. He mingled cheerfully in the diversions of the evening, and all rejoiced to find that his heart was lightened.

CHAP. III.

THE WANTS OF HIM THAT WANTS NOTHING.

On the next day his old instructor, imagining that he had now made himself acquainted with his disease of mind, was in hope of curing it by counsel, and officiously sought an opportunity of conference, which the prince, having long considered him as one whose intellects were exhausted, was not very willing to afford: "Why," said he, "does this man thus obtrude upon me; shall I be never suffered to forget those lectures which pleased only while they were new, and to become new again, must be forgotten?" He then walked into the wood, and composed himself to his usual meditations; when, before his thoughts had taken any settled form, he perceived his pursuer at his side, and was at first prompted by his impatience to go hastily away; but, being unwilling to offend a man whom he had once revered and still loved, he invited him to sit down with him on the bank.

The old man, thus encouraged, began to lament the change which had been lately observed in the prince, and to inquire why he so often retired from the pleasures of the palace, to loneliness and silence. "I fly from pleasure," said the prince, "because pleasure has ceased to please: I am lonely because I am miserable, and am unwilling to cloud with my presence the happiness of other." "You, sir," said the sage, "are the first who has complained of misery in the *happy valley*. I hope to convince you that your complaints have no real cause. You are here in full possession of all the emperor of Abyssinia can bestow; here is neither labour to be endured nor danger to be dreaded, yet here is all that labour or danger can procure or purchase. Look round and tell me which of your wants is without supply; if you want nothing, how are you unhappy?"

"That I want nothing," said the prince, "or that I know not what I want, is the cause of my complaint; if I had any known want, I should

have a certain wish ; that wish would excite endeavour, and I should not then repine to see the sun move so slowly towards the western mountain, or lament when the day breaks and sleep will no longer hide me from myself. When I see the kids and the lambs chasing one another, I fancy I should be happy if I had something to pursue. But, possessing all that I can want, I find one day and one hour exactly like another, except that the latter is still more tedious than the former. Let your experience inform me how the day may now seem as short as in my childhood, while nature was yet fresh, and every moment showed me what I never had observed before. I have already enjoyed too much ; give me something to desire." The old man was surprised at this new species of affliction, and knew not what to reply, yet was unwilling to be silent. "Sir," said he, "if you had seen the miseries of the world, you would know how to value your present state." "Now said the prince, "you have given me something to desire ; I shall long to see the miseries of the world, since the sight of them is necessary to happiness."

CHAP. IV.

THE PRINCE CONTINUES TO GRIEVE AND MUSE.

At this time the sound of music proclaimed the hour of repast, and the conversation was concluded. The old man went away sufficiently discontented ; to find that his reasonings had produced the only conclusion which they were intended to prevent. But in the decline of life shame and grief are of short duration ; whether it be that we bear easily what we have borne long ; or that, finding ourselves in age less regarded, we less regard others ; or, that we look with slight regard upon afflictions to which we know that the hand of death is about to put an end.

The prince, whose views were extended to a wider space, could not speedily quiet his emotions. He had been before terrified at the length of life which nature promised him, because he considered that in a long time much must be endured ; he now rejoiced in his youth, because in many years much might be done.—This first beam of hope, that had been ever darted into his mind, rekindled youth in his cheeks, and doubled the lustre of his eyes. He was fired with the desire of doing something, though he knew not yet with distinctness either end or means. He was now no longer gloomy and unsocial ; but, considering himself as master of a secret stock of happiness, which he could enjoy only by concealing it, he affected to be busy in all schemes of diversion, and endeavoured to make others pleased with the state of which he himself was weary. But pleasures never can be so multiplied or continued as not to leave much of life unemployed ; there were many hours, both of the night and day, which he could spend without suspicion in solitary thought. The load of life was much lightened ; he went eagerly into the assemblies, because he supposed the frequency of his presence necessary to the success of his purposes ; he retired gladly to privacy, because he had now a subject of thought. His chief amusement was to picture

to himself that world which he had never seen ; to place himself in various conditions ; to be entangled in imaginary difficulties, and to be engaged in wild adventure ; but his benevolence always terminated his projects in the relief of distress, the detection of fraud, the defeat of oppression, and the diffusion of happiness.

Thus passed twenty months of the life of Raselass, He busied himself so intensely in visionary bustle, that he forgot his real solitude ; and, amidst hourly preparations for the various incidents of human affairs, neglected to consider by what means he should mingle with mankind.

One day, as he was sitting on a bank, he feigned to himself an orphan virgin robbed of her little portion by a treacherous love, and crying after him for restitution and redress. So strongly was the image impressed upon his mind that he started up in the maid's defence and ran forward to seize the plunderer with all the eagerness of real pursuit. Fear naturally quickens the flight of guilt. Rasselas could not catch the fugitive with his utmost efforts ; but, resolving to weary, by perseverance, him whom he could not surpass in speed, he pressed on till the foot of the mountain stopped his course.

Here he collected himself, and smiled at his own useless impetuosity. Then raising his eyes to the mountain, "This," said he, "is the fatal obstacle that hinders at once the enjoyment of pleasure, and the exercise of virtue. How long is it that my hopes and wishes have flown beyond this boundary of my life, which yet I never have attempted to surmount!"—Struck with this reflection, he sat down to muse, and remembered, that since he first resolved to escape from his confinement, the sun had passed twice over him in his annual course. He now felt a degree of regret with which he had never been before acquainted. He considered how much might have been done in the time which had passed, and left nothing real behind it. He compared twenty months with the life of man. "In life," said he, "is not to be counted the ignorance of infancy, or the imbecility of age. We are long before we are able to think, and we soon cease from the power of acting. The true period of human existence may be reasonably estimated at forty years, of which I have mused away the four-and-twentieth part. What I have lost was certain, for I have certainly possessed it ; but of twenty months to come who can assure me?"

The consciousness of his own folly pierced him deeply, and he was long before he could be reconciled to himself. "The rest of my time," said he, "has been lost by the crime or folly of my ancestors and the absurd institutions of my country ; I remember it with disgust, yet without remorse : but the months that have passed since new light darted into my soul since I formed a scheme of reasonable felicity, have been squandered by my own fault. I have lost that which can never be restored ; I have seen the sun rise and set for twenty months, an idle gazer on the light of heaven : in this time the birds have left the nest of their mother, and committed themselves to the woods and to the skies : the kid has forsaken the teat, and learned by degrees to climb the rocks in quest of independent sustenance. I only have made no advances, but am still helpless and ignorant. The moon, by

more than twenty changes, admonished me of the flux of life; the stream that rolled before my feet upbraided my inactivity. I sat feasting on intellectual luxury regardless alike of the examples of the earth, and the instruction of the planets. Twenty months are passed, who shall restore them?"

These sorrowful meditations fastened upon his mind; he passed four months in resolving to lose no more time in idle resolves, and was awakened to more vigorous exertion by hearing a maid, who had broken a porcelain cup, remark, that what can not be repaired is not to be regretted.

This was obvious; and Rasselas reproached himself that he had not discovered it, having not known or not considered how many useful hints are obtained by chance, and how often the mind, hurried by her own ardour to distant views, neglects the truths that lie open before her. He, for a few hours, regretted his regret, and from that time bent his whole mind upon the means of escaping from the valley of happiness.

CHAP. V.

THE PRINCE MEDITATES HIS ESCAPE.

HE now found that it would be very difficult to effect that which it was very easy to suppose effected. When he looked round about him, he saw himself confined by the bars of nature, which had never yet been broken, and by the gate, through which none that once had passed it were ever able to return. He was now impatient as an eagle in the grate. He passed week after week in clambering the mountains, to see if there was any aperture which the bushes might conceal, but found all the summits inaccessible by their prominence. The iron gate he despaired to open; for it was not only secured with all the power of art, but was always watched by successive sentinels, and was by its position exposed to the perpetual observation of all the inhabitants.

He then examined the cavern through which the waters of the lake were discharged; and, looking down at a time when the sun shone strongly upon its mouth, he discovered it to be full of broken rocks, which, though they permitted the stream to flow through many narrow passages, would stop any body of solid bulk. He returned discouraged and dejected; but, having now known the blessing of hope, resolved never to despair.

In these fruitless searches he spent ten months. The time, however, passed cheerfully away: in the morning he rose with new hope, in the evening applauded his own diligence, and in the night slept sound after his fatigue. He met a thousand amusements which beguiled his labour and diversified his thoughts. He discerned the various instincts of animals and properties of plants, and found the place replete with wonders, of which he purposed to solace himself with the contemplation, if he should never be able to accomplish his flight; rejoicing that his endeavours, though yet unsuccessful, had supplied him with source of inexhaustible inquiry.

But his original curiosity was not yet abated; he resolved to obtain some knowledge of the ways of men. His wish still continued, but

his hope grew less. He ceased to survey any longer the walls of his prison, and spared to search by new toils for interstices which he knew could not be found, yet determined to keep his design always in view, and lay hold on any expedient that time should offer.

CHAP. VI.

A DISSERTATION ON THE ART OF FLYING.

AMONG the artists that had been allured into the happy valley, to labour for the accommodation and pleasure of its inhabitants, was a man eminent for his knowledge of the mechanic powers, who had contrived many engines both of use and recreation. By a wheel, which the stream turned, he forced the water into a tower, whence it was distributed to all the apartments of the palace. He erected a pavilion in the garden, around which he kept the air always cool by artificial showers. One of the groves, appropriated to the ladies, was ventilated by fans, to which the rivulet that ran through it gave a constant motion; and instruments of soft musick were placed at proper distances, of which some played by the impulse of the wind, and some by the power of the stream.

This artist was sometimes visited by Rasselas, who was pleased with every kind of knowledge, imagining that the time would come when all his acquisitions should be of use to him in the open world. He came one day to amuse himself in his usual manner, and found the master busy in building a sailing chariot: he saw that the design was practicable on a level surface, and with expressions of great esteem solicited its completion. The workman was pleased to find himself so much regarded by the prince and resolved to gain yet higher honours. "Sir" said he, "you have seen but a small part of what the mechanic sciences can perform. I have been long of opinion, that instead of the tardy conveyance of ships and chariots, man might use the swifter migration of wings; that the fields of air are open to knowledge, and that only ignorance and idleness need crawl upon the ground,"

This hint rekindled the prince's desire of passing the mountains; having seen what the mechanist had already performed, he was willing to fancy that he could do more; yet resolved to inquire further, before he suffered hope to afflict him by disappointment. "I am afraid," said he to the artist, "that your imagination prevails over your skill, and that you now tell me rather what you wish, than what you know. Every animal has his element assigned him; the birds have the air, the man and beasts the earth:" "So" replied the mechanist, "fishes have the water, in which yet beasts can swim by nature, and men by art. He that can swim needs not despair to fly: to swim is to fly in a grosser fluid, and to fly is to swim in a subtler. We are only to proportion our power of resistance to the different density of matter through which we are to pass. You will be necessarily upborne by the air, if you can renew any impulse upon it faster than the air can recede from the pressure."

"But the exercise of swimming," said the prince "is very laborious; the strongest limbs are soon wearied; I am afraid the act of

flying will be yet more violent; and wings will be of no great use, unless we can fly further than we can swim."

"The labour of rising from the ground," said the artist, "will be great, as we see it in the heavier domestic fowls, but as we mount higher, the earth's attraction and the body's gravity will be gradually deminished, till we shall arrive at a region where the man will float in the air without any tendency to fall: no care will then be necessary but to move forwards, which the gentlest impulse will effect. You, sir, whose curiosity is so extensive, will easily conceive with what pleasure a philosopher, furnished with wings, and hovering in the sky, would see the earth, and all its inhabitants, rolling beneath him, and presenting to him successively, by its diurnal motion, all the countries within the same parallel. How must it amuse the pendent spectator to see the moving scene of land and ocean, cities and deserts! To survey with equal serenity the marts of trade and the fields of battle; mountains infested by barbarians, and fruitful regions gladdened by plenty and lulled by peace! How easily shall we then trace the Nile through all his passage; pass over to distant regions, and examine the face of nature from one extremity of the earth to the other!"

"All this," said the prince, "is much to be desired; but I am afraid that no man will be able to breathe in these regions of speculation and tranquillity. I have been told, that respiration is difficult upon lofty mountains, yet from these precipices, though so high as to produce great tenuity of air, it is very easy to fall: therefore I suspect, that, from any height where life can be supported, there may be danger of too quick descent."

"Nothing," replied the artist, "will ever be attempted, if all possible objections must be first overcome. If you will favour my project, I will try the first flight at my own hazard. I have considered the structure of all volant animals, and find the folding continuity of the bat's wings most easily accommodated to the human form. Upon this model I shall begin my task to-morrow, and in a year except to tower into the air beyond the malice and pursuit of man. But I will work only on this condition, that the art shall not be divulged, and that you shall not require me to make wings for any but ourselves."

"Why," said Rasselas, "should you envy others so great an advantage? All skill ought to be exerted for universal good; every man has owed much to other, and ought to repay the kindness that he has received."

"If men were all virtuous," returned the artist, "I should with great alacrity teach them all to fly. But what would be the security of the good, if the bad could at pleasure invade them from the sky? Against an army sailing through the clouds, neither walls, nor mountains, nor seas, could afford any security. A flight of northern savages might hover in the wind and light at once with irresistible violence upon the capital of a fruitful region that was rolling under them. Even this valley, the retreat of princes, the abode of happiness, might be violated by the sudden descent of some of the naked nations that swarm on the coast of the southern sea."

The prince promised secrecy, and waited for the performance, not wholly hopeless of success. He visited the work from time to time

observed its progress, and remarked many ingenious contrivances to facilitate motion, and unite levity with strength. The artist was every day more certain that he should leave vultures and eagles behind him, and the contagion of his confidence seized upon the prince.

In a year the wings were finished, and, on a morning appointed, the maker appeared furnished for flight on a little promontory: he waved his pinions awhile to gather air, then leaped from his stand, and in an instant dropped into the lake. His wings, which were of no use in the air, sustained him in the water, and the prince drew him to land, half dead with terror and vexation.

CHAPTER VII.

THE PRINCE FINDS A MAN OF LEARNING.

The prince was not much afflicted by this disaster, having suffered himself to hope for a happier event, only because he had no other means of escape in view. He still persisted in his design to leave the happy valley by the first opportunity.

His imagination was now at a stand; he had no prospect of entering into the world; and, notwithstanding all his endeavours to support himself, discontent by degrees preyed upon him, and he began again to lose his thoughts in sadness, when the rainy season, which in these countries is periodical, made it inconvenient to wander in the woods.

The rain continued longer and with more violence than had ever been known: the clouds broke on the surrounding mountains, and the torrents streamed into the plain on every side, till the cavern was too narrow to discharge the water. The lake overflowed its banks, and all the level of the valley was covered with the inundation. The eminence, on which the palace was built, and some other spots of rising ground, were all that the eye could now discover. The herbs and flocks left the pastures, and both the wild beasts and the tame retreated to the mountains.

This inundation confined all the princes to domestic amusements, and the attention of Rasselas was particularly seized by a poem, which Imlac rehearsed, upon the various conditions of humanity. He commanded the poet to attend him in his apartment, and recite his verses a second time; then entering into familiar talk, he thought himself happy in having found a man who knew the world so well, and could so skilfully paint the scenes of life. He asked a thousand questions about things, to which, though common to all other mortals, his confinement from childhood had kept him a stranger. The poet pitied his ignorance, and loved his curiosity, and entertained him from day to day with novelty and instruction, so that the prince regretted the necessity of sleep, and longed till the morning should renew his pleasure.

As they were sitting together the prince commanded Imlac to relate his history, and to tell by what accident he was forced, or by what motive induced, to close his life in the happy valley. As he was going to begin his narrative, Rasselas was called to a concert, and obliged to restrain his curiosity till the evening.

CHAPTER VIII.

THE HISTORY OF IMLAC.

The close of the day is, in the regions of the torrid zone, the only season of diversion and entertainment, and it was therefore midnight before the music ceased, and the princesses retired. Rasselas then called for his companion, and required him to begin the story of his life.

"Sir," said Imlac, "my history will not be long: the life that is devoted to knowledge passes silently away, and is very little diversified by events. To talk in public, to think in solitude, to read and to hear, to inquire and answer inquires, is the business of a scholar. He wanders about the world without pomp or terror, and is neither known nor valued but by men like himself.

"I was born in the kingdom of Goïama, at no great distance from the fountain of the Nile. My father was a wealthy merchant, who traded between the inland countries of Africa and the ports of the Red Sea. He was honest, frugal, and diligent, but of mean sentiments and narrow comprehension: he desired only to be rich, and to conceal his riches, lest he should be spoiled by the governors of the province."

"Surely," said the prince, "my father must be negligent of his charge, if any man in his dominions dares take that which belongs to another. Does he not know that kings are accountable for injustice permitted as well as done? If I were emperor, not the meanest of my subjects should be oppressed with impunity. My blood boils when I am told that a merchant durst not enjoy his honest gains for fear of losing them by the rapacity of power. Name the governor who robbed the people, that I may declare his crimes to the emperor."

"Sir," said Imlac, "your ardour is the natural effect virtue animated by youth: the time will come when you will acquit your father, and perhaps hear with less impatience of the governor. Oppression is, in the Abyssinian dominions, neither frequent nor tolerated; but no form of government has yet been discovered, by which cruelty can be wholly prevented. Subordination supposes power on one part, and subjection on the other; and if power be in the hands of men, it will sometimes be abused. The vigilance of the supreme magistrate may do much, but much will still remain undone. He can never know all the crimes that are committed, and can seldom punish all that he knows."

"This," said the prince, "I do not understand, but I had rather hear thee than dispute. Continue thy narration."

"My father," proceeded Imlac, "originally intended that I should have no other education than such as might qualify me for commerce; and, discovering in me great strength of memory and quickness of apprehension, often declared his hope that I should be some time the richest man in Abyssinia."

"Why," said the prince, "did thy father desire the increase of his wealth, when it was already greater than he durst discover or enjoy? I am unwilling to doubt thy veracity, yet inconsistencies cannot both be true."

"Inconsistencies," answered Imlac, "cannot both be right, but, imputed to man, they may both be true. Yet diversity is not inconsistency. My father might expect a time of great security. However, some desire is necessary to keep life in motion, and he, whose real wants are supplied, must admit those of fancy."

"This," said the prince, "I can in some measure conceive. I repent that I interrupted thee."

"With this hope," proceeded Imlac, "he sent me to school; but when I had once found the delight of knowledge, and felt the pleasure of intelligence and the pride of invention, I began silently to despise riches, and determined to disappoint the purpose of my father, whose grossness of conception raised my pity. I was twenty years old before his tenderness would expose me to the fatigue of travel, in which time I had been instructed by successive masters, in all the literature of my native country. As every hour taught me something new, I lived in a continual course of gratifications; but, as I advanced towards manhood, I lost much of the reverence with which I had been used to look on my instructors; because, when the lesson was ended, I did not find them wiser or better than common men.

At length my father resolved to initiate me in commerce: and, opening one of his subterranean treasures, counted out ten thousand pieces of gold. 'This, young man,' said he, 'is the stock with which you must negotiate. I began with less than the fifth part, and you see how diligence and parsimony have increased it. This is your own to waste or to improve. If you squander it by negligence or caprice, you must wait for my death before you will be rich; if, in four years, you double your stock, we will thenceforward let subordination cease, and live together as friends and partners; for he shall always be equal with me, who is equally skilled in the art of growing rich.'

"We laid our money upon camels, concealed in bales of cheap goods and travelled to the shore of the Red Sea. When I cast my eye on the expanse of waters, my heart bounded like that of a prisoner escaped.

I felt an unextinguishable curiosity kindle in my mind, and resolved to snatch this opportunity of seeing the manners of other nations, and of learning science unknown in Abyssinia.

"I remembered that my father had obliged me to the improvenment of my stock, not by a promise which I ought not to violate, but by a penalty which I was at liberty to incur and therefore determined to gratify my predominant desire, and by drinking at the fountains of knowledge, to quench the thirst of curiosity.

"As I was supposed to trade without connexion with my father, it was easy for me to become acquainted with the master of a ship and procure a passage to some other country. I had no motives of choice to regulate my voyage, it was sufficient for me that, wherever I wandered, I should see a country which I had not seen before. I therefore entered a ship bound for Surat, having left a letter for my father, declaring my intention."

CHAP IX.

THE HISTORY OF IMLAC CONTINUED.

"WHEN I first entered upon the world of waters, and lost sight of land, I looked round about me with pleasing terror, and, thinking my soul enlarged by the boundless prospect, imagined that I could gaze round for ever without satiety; but, in a short time, I grew weary of looking on barren uniformity, where I could only see again what I had already seen. I then descended into the ship, and doubted for a while whether all my future pleasures would not end like this, in disgust and disappointment. Yet, surely said I, the ocean and the land are very different; the only variety of water is rest and motion, but the earth has mountains and valleys, deserts and cities; it is inhabited by men of different customs and contrary opinions; and I may hope to find variety in life, though I should miss it in nature.

"With this thought I quieted my mind, and amused myself during the voyage, sometimes by learning from the sailors the art of navigation which I have never practised, and sometimes by forming schemes for my conduct in different situations, in not one of which I have been ever placed.

"I was almost weary of my naval amusements when we landed safely at Surat. I secured my money, and, purchasing some commodities for show, joined myself to a caravan that was passing into the inland country. My companions, for some reason or other, conjecturing that I was rich, and, by my inquiries and admiration, finding that I was ignorant, considered me as a novice whom they had a right to cheat, and who was to learn at the usual expense the art of fraud. They exposed me to the theft of servants and the exaction of officers, and saw me plundered upon false pretences, without any advantage to themselves, but that of rejoicing in the superiority of their own knowledge."

"Stop a moment," said the prince. "Is there such depravity in man, as that he should injure another without benefit to himself? I can easily conceive that all are pleased with superiority; but your ignorance was merely accidental, which being neither your crime nor your folly, could afford them no reason to applaud themselves; and the knowledge which they had, and which you wanted, they might as effectually have shown by warning as betraying you."

"Pride," said Imlac, "is seldom delicate, it will please itself with very mean advantages; and envy feels not its own happiness, but when it may be compared with the misery of others. They were my enemies, because they grieved to think me rich; and my oppressors, because they delighted to find me weak."

"Proceed," said the prince; "I doubt not of the facts which you relate, but imagine that you impute them to mistaken motives."

"In this company," said Imlac, "I arrived at Agra, the capital of Indostan, the city in which the great Mogul commonly resides. I applied myself to the language of the country, and in a few months was able to converse with the learned men, some of whom I found morose and reserved, and others easy and communicative; some were unwill-

ing to teach another what they had with difficulty learned themselves and some showed that the end of their studies was to gain the dignity of instructing.

“To the tutor of the young princes I recommended myself so much, that I was presented to the emperor as a man of uncommon knowledge. The emperor asked me many questions concerning my country and my travels; and though I cannot now recollect anything that he uttered above the power of a common man, he dismissed me astonished at his wisdom, and enamoured of his goodness.

“My credit was now so high that the merchants with whom I had travelled, applied to me for recommendations to the ladies of the court. I was surprised at their confidence of solicitation, and gently reproached them with their practices on the road. They heard me with cold indifferences, and showed no tokens of shame or sorrow.

“They then urged their request with the offer of a bribe; but what I would not do for kindness, I would not do for money, and refused them, not because they had injured me, but because I would not enable them to injure others; for I knew they would have made use of my credit to cheat those who should buy their wares.

“Having resided at Agra till there was no more to be learned, I travelled into Persia, where I saw many remains of ancient magnificence, and observed many new accommodations of life. The Persians are a nation eminently social, and their assemblies afforded me daily opportunities of remarking characters and manners, and of tracing human nature through all its variations.

“From Persia I passed into Arabia, where I saw a nation at once pastoral and warlike; who live without any settled habitation, whose only wealth is their flocks and herds, and who have yet carried on, through all ages, an hereditary war with all mankind, though they neither covet nor envy their possessions.”

CHAP. X.

IMLAC'S HISTORY CONTINUED. A DISSERTATION UPON POETRY.

“WHEREVER I went, I found that poetry was considered as the highest learning, and regarded with a veneration somewhat approaching to that which man would pay to the Angelic Nature. And yet it fills me with wonder, that, in almost all countries, the most ancient poets are considered as the best; whether it be that every other kind of knowledge is an acquisition gradually attained, and poetry is a gift conferred at once; or that the first poetry of every nation surprised them as a novelty, and retained the credit by consent, which it received by accident at first; or whether, as the province of poetry is to describe nature and passion, which are always the same, the first writers took possession of the most striking objects for description, and the most probable occurrences for fiction, and left nothing to those that followed them, but transcription of the same events, and new combinations of the same images. Whatever be the reason, it is commonly observed

that the early writers are in possession of nature, and their followers of art; that the first excel in strength and invention, and the latter in elegance and refinement.

"I was desirous to add my name to this illustrious fraternity. I read all the poets of Persia and Arabia, and was able to repeat by memory the volumes that are suspended in the mosque of Mecca.

"But I soon found that no man was ever great by imitation. My desire of excellence impelled me to transfer my attention to nature and to life. Nature was to be my subject, and men to be my auditors: I could never describe what I had not seen: I could not hope to move those with delight or terror, whose interests and opinions I did not understand.

"Being now resolved to be a poet, I saw every thing with a new purpose; my sphere of attention was suddenly magnified: no kind of knowledge was to be overlooked. I ranged mountains and deserts for images and resemblances, and pictured upon my mind every tree of the forest and flower of the valley. I observed with equal care the crags of the rock and the pinnacles of the palace. Sometimes I wandered along the mazes of the rivulet, and sometimes watched the changes of the summer clouds. To a poet nothing can be useless. Whatever is beautiful and whatever is dreadful must be familiar to his imagination: he must be conversant with all that is awfully vast or elegantly little. The plants of the garden, the animals of the wood, the minerals of the earth and meteors of the sky, must all concur to store his mind with inexhaustible variety: for every idea is useful for the enforcement or decoration of moral or religious truth, and he who knows most will have most power of diversifying his scenes, and of gratifying his reader with remote allusions and unexpected instruction.

"All the appearances of nature I was therefore careful to study, and every country which I have surveyed has contributed something to my poetical powers."

"In so wide a survey," said the prince, "you must surely have left much unobserved. I have lived till now, within the circuit of these mountains, and yet cannot walk abroad without the sight of something which I had never beheld before or never heeded."

"The business of a poet," said Imlac, "is to examine, not the individual, but the species; to remark general properties and large appearances; he does not number the streaks of the tulip, or describe the different shades in the verdure of the forest. He is to exhibit in his portraits of nature such prominent and striking features as recal the original to every mind; and must neglect the minuter discriminations, which one may have remarked, and another have neglected, for those characteristics which are alike obvious to vigilance and carelessness.

"But the knowledge of nature is only half the task of a poet; he must be acquainted likewise with all the modes of life. His character requires that he estimate the happiness and misery of every condition; observe the power of all the passions in all their combinations, and trace the changes of the human mind as they are modified by various institutions and accidental influences of climate or custom from the

sprightliness of infancy to the despondence of decrepitude. He must divest himself of the prejudices of his age or country; he must consider right and wrong in their abstracted and invariable state: he must disregard present laws and opinions, and rise to general and transcendental truths, which will always be the same; he must therefore content himself with the slow progress of his name; condemn the applause of his own time, and commit his claims to the justice of posterity. He must write as the interpreter of nature, and the legislator of mankind, and consider himself as presiding over the thoughts and manners of future generations; as a being superior to time and place.

"His labour is not yet at an end: he must know many languages and many sciences; and, that his style may be worthy of his thoughts, must, by incessant practice, familiarise to himself every delicacy of speech and grace of harmony."

CHAP. XI.

IMLAC'S NARRATIVE CONTINUED. A HINT ON PILGRIMAGE.

IMLAC now felt the enthusiastic fit, and was proceeding to aggrandise his own profession, when the prince cried out; "Enough! thou hast convinced me, that no human being can ever be a poet. Proceed with thy narration."

"To be a poet," said Imlac, "is indeed very difficult." "So difficult," returned the prince, "that I will at present hear no more of his labours. Tell me whither you went when you had seen Persia."

"From Persia," said the poet, "I travelled through Syria, and for three years resided in Palestine, where I conversed with great numbers of the northern and western nations of Europe; the nations which are now in possession of all power and all knowledge: whose armies are irresistible, and whose fleets command the remotest parts of the globe. When I compared these men with the natives of our own kingdom, and those that surround us, they appeared almost another order of beings. In their countries it is difficult to wish for any thing that may not be obtained: a thousand arts, of which we never heard, are continually labouring for their convenience and pleasure; and whatever their own climate has denied them, is supplied by their commerce."

"By what means," said the prince, "are the Europeans thus powerful; or why, since they can so easily visit Asia and Africa for trade or conquest, cannot the Asiatics and Africans invade their coasts, plant colonies in their ports, and give laws to their natural prince? The same wind that carries them back would bring us thither."

"They are more powerful, sir, than we," answered Imlac, "because they are wiser; knowledge will always predominate over ignorance, as man governs the other animals. But why their knowledge is more than ours, I know not what reason can be given, but the unsearchable will of the Supreme Being."

"When," said the prince, with a sigh "shall I be able to visit Palestine, and mingle with this mighty confluence of nations? Till that happy moment shall arrive, let me fill up the time with such

representations as thou canst give me. I am not ignorant of the motive that assembles such numbers in that place, and cannot but consider it as the centre of wisdom and piety, to which the best and wisest men of every land must be continually resorting."

"There are some nations," said Imlac, "that send few visitants to palestine; for many numerous and learned sects in Europe concur to censure pilgrimage as superstitious, or deride it as ridiculous."

"You know," said prince, "how little my life has made me acquainted with diversity of opinions: it will be too long to hear the arguments on both side; you that have considered them, tell me the result."

"Pilgrimage," said Imlac, "like many other acts of piety, may be reasonable or superstitious, according to the principles upon which it is performed. Long journeys in search of truth are not commanded. Truth, such as is necessary to the regulation of life, is always found where it is honestly sought. Change of place is no natural cause of the increase of piety, for it inevitably produces dissipation of mind. Yet, since men go every day to view the fields where great actions have been performed, and return with stronger impressions of the event curiosity of the same kind my naturally dispose us to view that country whence our religion had its beginning; and I believe no man surveys those awful scenes without some confirmation of holy resolutions. That the Supreme Being may be more easily propitiated in one place than in another is the dream of idle superstition; but that some places may operate upon our own minds in an uncommon manner, is an opinion which hourly experience will justify. He who supposes that his vices may be more successfully combated in Palestine, will, perhaps, find himself mistaken; yet he may go thither without folly he who thinks they will be more freely pardoned dishonours at once his reason and religion."

"These," said the prince, "are European distinctions. I will consider them another time. What have you found to be the effect of knowledge? Are those nations happier than we?"

"There is so much infelicity," said the poet, "in the world, that scarce any man has leisure from his own distresses to estimate the comparative happiness of others. Knowledge is certainly one of the means of pleasure, as is confessed by the natural desire which every mind feels of increasing its ideas. Ignorance is mere privation, by which nothing can be produced: it is a vacuity in which the soul sits motionless and torpid for want of attraction; and, without knowing why, we always rejoice when we learn, and grieve when we forget. I am therefore inclined to conclude, that if nothing counteracts the natural consequence of learning, we grow more happy as our minds take a wider range."

"In enumerating the particular comforts of life, we shall find many advantages on the side of the Europeans. They cure wounds and diseases with which we languish and perish. We suffer inclemencies of weather which they can obviate. They have engines for the dispatch of many laborious works which we must perform by manual industry."

There is such communication between distant places that one friend can hardly be said to be absent from another. Their policy removes all public inconveniences: they have roads cut through their mountains, and bridges laid upon their rivers. And, if we descend to the privacies of life, their habitations are more commodious, and their possessions are more secure."

"They are surely happy," said the prince, "who have all these conveniences, of which I envy none so much as the facility with which separated friends interchange their thoughts."

"The Europeans," answered Imlac, "are less unhappy than we, but they are not happy. Human life is every where a state in which much is to be endured, and little to be enjoyed."

CHAP. XII.

THE HISTORY OF IMLAC CONTINUED.

"I AM not yet willing," said the prince, "to suppose that happiness is so parsimoniously distributed to mortals; nor can believe but that, if I had the choice of life, I should be able to fill every day with pleasure. I would injure no man, and should provoke no resentment: I would relieve every distress, and should enjoy the benedictions of gratitude. I would choose my friends among the wise, and my wife among the virtuous; and therefore should be in no danger from treachery or unkindness. My children should, by my care, be learned and pious and would repay to my age what their childhood had received. What would dare to molest him who might call on every side to thousands enriched by his bounty, or assisted by his power? And why should not life glide quietly away in the soft reciprocation of protection and reverence? All this may be done without the help of European refinements, which appear by their effects to be rather specious than useful. Let us leave them, and pursue our journey."

"From Palastine," said Imlac, "I passed through many regions of Asia, in the more civilised kingdoms as a trader, and among the barbarians of the mountains as a pilgrim. At last I began to long for my native country, that I might repose, after my travels and fatigues, in the places where I had spent my earliest years, and gladden my old companions with the recital of my adventures. Often did I figure to myself those with whom I had sported away the gay hours of dawning life, sitting round me in its evening, wondering at my tales, and listening to my counsels.

"When this thought had taken possession of my mind, I considered every moment as wasted which did not bring me nearer to Abyssinia. I hastened into Egypt, and, notwithstanding my impatience, was detained ten months in the contemplation of its ancient magnificence, and in inquiries after the remains of its ancient learning. I found in Cairo a mixture of all nations; some brought thither by the love of knowledge, some by the hope of gain, and many by the desire of living after their own manner without observation, and of lying hid in the obscurity of multitudes: for in a city populous as Cairo, it is possible

to obtain at the same time the gratifications of society and the secrecy of solitude.

"From Cairo I travelled to Suez, and embarked on the Red Sea, passing along the coast till I arrived at the port from which I had departed twenty years before. Here I joined myself to caravan, and re-entered my native country.

"I now expected the caresses of my kinsmen, and the congratulations of my friends, and was not without hope that my father, whatever value he had set upon riches, would own with gladness and pride a son who was able to add to the felicity and honour of the nation. But I was soon convinced that my thoughts were vain. My father had been dead fourteen years, having divided his wealth among my brothers, who were removed to some other provinces. Of my companions the greater part was in the grave; of the rest, some could with difficulty remember me, and some considered me as one corrupted by foreign manners.

"A man used to vicissitudes is not easily dejected. I forgot, after a time, my disappointment, and endeavoured to recommend myself to the nobles of the kingdom; they admitted me to their tables, heard my story, and dismissed me. I opened a school, and was prohibited to teach. I then resolved to sit down in the quiet of domestic life, and addressed a lady that was fond of my conversation, but rejected my suit because my father was a merchant.

"Wearied at last with solicitation and repulses, I resolved to hide myself for ever from the world, and depend no longer on the opinion or caprice of others. I waited for the time when the gate of the *happy valley* should open, that I might bid farewell to hope and fear: the day came; my performance was distinguished with favour and I resigned myself with joy to perpetual confinement."

"Hast thou here found happiness at last?" said Rasselas. "Tell me without reserve; art thou content with thy condition? or dost thou wish to be again wandering and inquiring? All the inhabitants of this valley celebrate their lot, and, at the annual visit of the emperor, invite others to partake of their felicity."

Great prince, "said Imlac," I shall speak the truth; I know not one of all your attendants who does not lament the hour when he entered this retreat. I am less unhappy than the rest, because I have a mind replete with images, which I can vary and combine at pleasure. I can amuse my solitude by the renovation of the knowledge which begins to fade from my memory, and by recollection of the incidents of my past life. Yet all this ends in the sorrowful consideration, that my acquirements are now useless, and that none of my pleasures can be again enjoyed. The rest, whose minds have no impression but of the present moment, are either corroded by malignant passions or sit stupid in the gloom of perpetual vacancy."

"What passions can infest those," said the prince, "who have no rivals? We are in a place where impotence precludes malice. and where all envy is repressed by community of enjoyments.

"There may be community," said Imlac, "of material possessions, but there can never be community of love or of esteem. It must happen

that one will please more than another ; he that knows himself despised will always be envious ; and still more envious and malevolent, if he is condemned to live in the presence of those who despise him. The invitations by which they allure others to a state which they feel to be wretched, proceed from the natural malignity of hopeless misery. They are weary of themselves and of each other, and expect to find relief in new companions. They envy the liberty which their folly has forfeited, and would gladly see all mankind imprisoned like themselves.

" From this crime, however, I am wholly free. No man can say that he is wretched by my persuasion. I look with pity on the crowds who are annually soliciting admission to captivity, and wish that it were lawful for me to warn them of their danger."

" My dear Imlac," said the prince, " I will open to thee my whole heart. I have long meditated an escape from the *happy valley*. I have examined the mountains on every side, but find myself insuperably barred ; teach me the way to break my prison ; thou shalt be the companion of my flight, the guide of my rambles, the partner of my fortune, and my sole director in the *choice of life*."

" Sir," answered the poet, " your escape will be difficult, and, perhaps, you may soon repent your curiosity. The world, which you figure to yourself smooth and quiet as the lake in the valley, you will find a sea foaming with tempests and boiling with whirlpools : you will be sometimes overwhelmed by the waves of violence, and sometimes dashed against the rocks of treachery. Amidst wrongs and frauds, competitions and anxieties, you will wish a thousand times for those seats of quiet, and willingly quit hope to be free from fear."

" Do not seek to deter me from my purpose," said the prince ; " I am impatient to see what thou hast seen ; and, since thou art thyself weary of the valley, it is evident that thy former state was better than this. Whatever be the consequence of my experiment, I am resolved to judge with mine own eyes of the various conditions of men, and then to make deliberately my *choice of life*."

" I am afraid," said Imlac, " you are hindered by stronger restraints than my persuasions ; yet, if your determination is fixed, I do not counsel you to despair. Few things are impossible to diligence and skill."

CHAP. XIII.

RASSELAS DISCOVERS THE MEANS OF ESCAPE.

The prince now dismissed his favourite to rest, but the narrative of wonders and novelties filled his mind with perturbation. He revolved all that he had heard, and prepared innumerable questions for the morning.

Much of his uneasiness was now removed. He had a friend to whom he could impart his thoughts, and whose experience could assist him in his designs. His heart was no longer condemned to swell with silent vexation. He thought that even the *happy valley* might be endured with such a companion ; and that, if they could range the world together, he should have nothing further to desire.

In a few days the water was discharged, and the ground dried. The prince and Imlac then walked out together to converse without the notice of the rest. The prince, whose thoughts were always on the wing, as he passed by the gate, said, with a countenance of sorrow, "Why art thou so strong, and why is man so weak?" "Man is not weak," answered his companion; "knowledge is more than equivalent to force. The master of mechanics laughs at strength. I can burst the gate, but cannot do it secretly. Some other expedient must be tried."

As they were walking on the side of the mountain, they observed that the conies, which the rain had driven from their burrows, had taken shelter among the bushes, and formed holes behind them, tending upwards in an oblique line. "It has been the opinion of antiquity," said Imlac, "that human reason borrowed many arts from the instinct of animals; let us, therefore, not think ourselves degraded by learning from the cony. We may escape by piercing the mountain in the same direction. We will begin where the summit hangs over the middle part, and labour upward till we shall issue up beyond the prominence."

The eyes of the prince, when he heard this proposal, sparkled with joy. The execution was easy, and the success certain.

No time was lost. They hastened early in the morning to choose a place proper for their mine. They clambered with great fatigue among crags and brambles, and returned without having discovered any part that favoured their design. The second and the third day were spent in the same manner, and with the same frustration. But on the fourth, they found a small cavern, concealed by a thicket, where they resolved to make their experiment.

Imlac procured instruments proper to hew stone and remove earth, and they fell to their work on the next day with more eagerness than vigour. They were presently exhausted by their efforts, and sat down to pant upon the grass. The prince for a moment appeared to be discouraged. "Sir," said his companion, "practice will enable us to continue our labour for a longer time; mark, however, how far we have advanced, and you will find that our toil will some time have an end. Great works are performed, not by strength, but perseverance: yonder palace was raised by single stones, yet you see its height and spaciousness. He that shall walk with vigour three hours a day, will pass in seven years a space equal to the circumference of the globe."

They returned to their work day after day; and, in a short time, found a fissure in the rock, which enabled them to pass far with very little obstruction. This Rasselas considered as a good omen. "Do not disturb your mind," said Imlac, "with other hopes or fears than reason may suggest; if you are pleased with prognostics of good, you will be terrified likewise with tokens of evil, and your whole life will be a prey to superstition. Whatever facilitates our work is more than an omen, it is a cause of success. This is one of those pleasing surprises which often happen to active resolution. Many things difficult to design prove easy to performance."

CHAP. XIV.

RASSELAS AND IMLAC RECEIVE AN UNEXPECTED VISIT.

THEY had now wrought their way to the middle, and solaced their toil with the approach of liberty, when the prince, coming down to refresh himself with air, found his sister Nekayah standing before the mouth of the cavity. He started and stood confused, afraid to tell his design, and yet hopeless to conceal it. A few moments determined him to repose on her fidelity, and secure her secrecy by a declaration without reserve.

"Do not imagine," said the princess, "that I came hither as a spy : I had long observed from my window, that you and Imlac directed your walk every day towards the same point, but I did not suppose you had any better reason for the preference than a cooler shade, or more fragrant bank ; nor followed you with any other design than to partake of your conversation. Since then not suspicion but fondness has detected you, let me not lose the advantage of my discovery. I am equally weary of confinement with yourself, and not less desirous of knowing what is done or suffered in the world. Permit me to fly with you from this tasteless tranquillity, which will yet grow more loathsome when you have left me. You may deny me to accompany you, but cannot hinder me from following."

The prince, who loved Nekayah above his other sisters, had no inclination to refuse her request, and grieved that he had lost an opportunity of showing his confidence by a voluntary communication. It was therefore agreed that she should leave the valley with them ; and that, in the mean time, she should watch lest any other straggler should, by chance or curiosity, follow them to the mountain.

At length their labour was at an end : they saw light beyond the prominence, and, issuing to the top of the mountain, beheld the Nile, yet a narrow current, wandering beneath them.

The prince looked round with rapture, anticipated all the pleasures of travel, and in thought was already transported beyond his father's dominions. Imlac, though very joyful at his escape, had less expectation of pleasure in the world, which he had before tried, and of which he had been weary.

Rasselas was so much delighted with a wider horizon, that he could not soon be persuaded to return into the valley. He informed his sister that the way was open, and that nothing now remained but to prepare for their departure.

CHAP. XV.

THE PRINCE AND PRINCESS LEAVE THE VALLEY, AND SEE MANY
WONDERS.

THE prince and princess had jewels sufficient to make them rich whenever they came into a place of commerce, which, by Imlac's direction, they might hide in their clothes ; and, on the night of the next full moon,

all left the valley. The princess was followed only by a single favourite, who did not know whither she was going.

They clambered through the cavity, and began to go down on the other side. The princess and her maid turned their eyes towards every part, and, seeing nothing to bound their prospect, considered themselves as in danger of being lost in a dreary vacuity. They stopped and trembled. "I am almost afraid," said the princess, "to begin a journey of which I cannot perceive an end, and to venture into this immense plain, where I may be approached on every side by men whom I never saw." The prince felt nearly the same emotions, though he thought it more manly to conceal them.

Imlac smiled at their terrors, and encouraged them to proceed; but the princess continued irresolute till she had been imperceptibly drawn forward too far to return. In the morning they found some shepherds in the field, who set milk and fruits before them. The princess wondered that she did not see a palace ready for her reception, and a table spread with delicacies; but, being faint and hungry, she drank the milk and ate the fruits, and thought them of a higher flavour than the products of the valley.

They travelled forward by easy journeys, being all unaccustomed to toil or difficulty, and knowing that, though they might be missed, they could not be pursued. In a few days they came into a more populous region, where Imlac was diverted with the admiration which his companions expressed at the diversity of manners, stations, and employments.

Their dress was such as might not bring upon them the suspicion of having any thing to conceal; yet the prince, wherever he came, expected to be obeyed, and the princess was frightened, because those that came into her presence did not prostrate themselves before her. Imlac was forced to observe them with great vigilance, lest they should betray their rank by their unusual behaviour, and detained them several weeks in the first village, to accustom them to the sight of common mortals.

By degrees the royal wanderers were taught to understand that they had for a time laid aside their dignity, and were to expect only such regard as liberality and courtesy could procure. And Imlac, having, by many admonitions, prepared them to endure the tumults of a port, and the ruggedness of the commercial race, brought them down to the sea coast.

The prince and his sister, to whom every thing was new, were gratified equally at all places, and therefore remained for some months at the port without any inclination to pass further. Imlac was content with their stay, because he did not think it safe to expose them, unpractised in the world, to the hazards of a foreign country.

At last he began to fear lest they should be discovered, and proposed to fix a day for their departure. They had no pretensions to judge for themselves, and referred the whole scheme to his direction. He therefore took passage in a ship to Suez; and, when the time came, with great difficulty prevailed on the princess to enter the vessel. They had a quick and prosperous voyage; and from Suez travelled by land to Cairo.

CHAP XVI

THEY ENTER CAIRO AND FIND EVERY MAN HAPPY.

As they approached the city, which filled the strangers with astonishment, "This," said Imlac to the prince, "is the place where travellers and merchants assemble from all the corners of the earth. You will here find men of every character and every occupation. Commerce is here honorable: I will act as a merchant, and you shall live as strangers who have no other end of travel than curiosity; it will soon be observed that we are rich; our reputation will procure us access to all whom we shall desire to know; you will see all the conditions of humanity, and enable yourself at leisure to make your *choice of life*."

They now entered the town, stunned by the noise and offended by the crowds. Instruction had not yet so prevailed over habit, but that they wondered to see themselves pass undistinguished along the street, and met by the lowest of the people without reverence or notice. The princess could not at first bear the thought of being levelled with the vulgar, and for some days continued in her chamber, where she was served by her favourite Pekuah as in the palace of the valley.

Imlac, who understood traffic, sold part of the jewels the next day, and hired a house, which he adorned with such magnificence that he was immediately considered as a merchant of great wealth. His politeness attracted many acquaintance, and his generosity made him courted by many dependants. His table was crowded by men of every nation, who all admired his knowledge and solicited his favour. His companions, not being able to mix in the conversation, could make no discovery of their ignorance or surprise, and were gradually initiated in the world as they gained knowledge of the language,

The prince had, by frequent lectures, been taught the use and nature of money; but the ladies could not for a long time comprehend what the merchants did with small pieces of gold and silver, or why things of so little use should be received as equivalent to the necessities of life.

They studied the language two years; while Imlac was preparing to set before them the various ranks and conditions of mankind. He grew acquainted with all who had any thing uncommon in their fortune or conduct. He frequented the voluptuous and the frugal, the idle and the busy, the merchants and the men of learning.

The prince being now able to converse with fluency, and having learned the caution necessary to be observed in his intercourse with strangers, began to accompany Imlac to places of resort, and to enter into all assemblies, that he might make his *choice of life*.

For some time he thought choice needless, because all appeared to him equally happy. Wherever he went he met gaiety and kindness, and heard the song of joy or the laugh of carelessness. He began to believe that the world overflowed with universal plenty, and that nothing was withheld either from want or merit; that every hand showered liberality, and every heart melted with benevolence: "and who then," said he, "will be suffered to be wretched?"

Imlac permitted the pleasing delusion, and was unwilling to crush the hope of inexperience, till one day, having sat awhile silent, "I

know not," said the prince, "what can be the reason that I am more unhappy than any of our friends. I see them perpetually and unalterably cheerful, but feel my own mind restless and uneasy. I am unsatisfied with those pleasures which I seem most to court. I live in the crowds of jollity, not so much to enjoy company as to shun myself, and am only loud and merry to conceal my sadness."

"Every man," said Imlac, "may, by examining his own mind, guess what passes in the minds of others: when you feel that your own gaiety is counterfeit, it may justly lead you to suspect that of your companions not to be sincere. Envy is commonly reciprocal. We are long before we are convinced that happiness is never to be found, and each belives it possessed by others to keep alive the hope of obtaining it for himself. In the assembly where you passed the last night, there appeared such sprightliness of air and volatility of fancy as might have suited beings of a higher order, formed to inhabit serener regions inaccessible to care or sorrow: yet believe me, prince, there was not one who did not dread the moment when solitude should deliver him to the tyranny of reflection."

"This," said the prince, "may be true of others, since it is true of me: yet whatever be the general infelicity of man, one condition is more happy than another, and wisdom surely directs us to take the least evil in the *choice of life*."

"The causes of good and evil," answered Imlac, "are so various and uncertain, so often entangled with each other, so diversified by various relations, and so much subject to accidents which cannot be foreseen, that he who would fix his condition upon incontestible reasons of preference, must live and die inquiring and deliberating."

"But surely," said Rasselas, "the wise men, to whom we listen with reverence and wonder, chose that mode of life for themselves which they thought most likely to make them happy." "very few," said the poet, "live by choice. Every man is placed in his present condition by causes which acted without his foresight, and with which he did not always willingly co-operate; and therefore you will rarely meet one who does not think the lot of his neighbour better than his own."

"I am pleased to think," said the prince, "that my birth has given me at least one advantage over others, by enabling me to determine for myself. I have here the world before me; I will review it at leisure: surely happiness is somewhere to be found."

CHAP. XVII.

THE PRINCE ASSOCIATES WITH YOUNG MEN OF SPIRIT AND GAIETY.

RASSELAS rose next day, and resolved to begin his experiments upon life. "Youth," cried he, "is the time of gladness: I will join myself to the young men, whose only business is to gratify their desires, and whose time is all spent in a succession of enjoyments."

To such societies he was readily admitted; but a few days brought him back weary and disgusted. Their mirth was without images; their laughter without motive; their pleasures were gross and sensual, in which the mind had no part; their conduct was at once wild and

mean; they laughed at order and at law, but the frown of power dejected, and the eye of wisdom abashed them.

The prince soon concluded that he should never be happy in a course of life of which he was ashamed. He thought it unsuitable to a reasonable being to act without a plan, and to be sad or cheerful only by chance. "Happiness," said he, "must be something solid and permanent, without fear and without uncertainty."

But his young companions had gained so much of his regard by their frankness and courtesy that he could not leave them without warning and remonstrance. "My friends," said he, "I have seriously considered our manners and our prospects, and find that we have mistaken our own interest. The first years of man must make provision for the last. He that never thinks never can be wise. Perpetual levity must end in ignorance; and intemperance, though it may fire the spirits for an hour, will make life short or miserable. Let us consider that youth is of no long duration, and that in maturer age, when the enchantments, of fancy shall cease, and phantoms of delight dance no more about us, we shall have no comforts but the esteem of wise men, and the means of doing good. Let us, therefore, stop, while to stop is in our power: let us live as men who are some time to grow old, and to whom it will be the most dreadful of all evils to count their past years by follies, and to be reminded of their former luxuriance of health only by the maladies which riot has produced."

They stared awhile in silence one upon another, and at last drove him away by a general chorus of continued laughter.

The consciousness that his sentiments were just and his intentions kind, was scarcely sufficient to support him against the horror of derision. But he recovered his tranquillity and pursued his search.

CHAP. XVIII.

THE PRINCE FINDS A WISE AND HAPPY MAN

As he was one day walking in the street, he saw a spacious building, which all were, by the open doors, invited to enter. He followed the stream of people, and found it a hall or school of declamation, in which professors read lectures to their auditory. He fixed his eye upon a sage raised above the rest, who discoursed with great energy on the government of the passions. His look was venerable, his action graceful, his pronunciation clear, and his diction elegant. He showed, with great strength of sentiment and variety of illustration, that human nature is degraded and debased, when the lower faculties predominate over the higher; that when fancy, the parent of passion, usurps the dominion of the mind, nothing ensues but the natural effect of unlawful government, perturbation and confusion; that she betrays the fortresses of the intellect to rebels, and excites her children to sedition against reason, their lawful sovereign. He compared reason to the sun, of which the light is constant, uniform, and lasting; and fancy to a meteor, of bright but transitory lustre, irregular in its motion, and delusive in its direction.

He then communicated the various precepts given from time to time for the conquest of passion, and displayed the happiness of those who had obtained the important victory, after which man is no longer the slave of fear, nor the fool of hope; is no more emaciated by envy, inflamed by anger, emasculated by tenderness, or depressed by grief; but walks on calmly through the tumults or privacies of life, as the sun pursues alike his course through the calm or the stormy sky.

He enumerated many examples of heroes immoveable by pain or pleasure, who looked with indifference on those modes or accidents to which the vulgar give the names of good and evil. He exhorted his hearers to lay aside their prejudices, and arm themselves against the shafts of malice or misfortune, by invulnerable patience, concluding, that this state only was happiness, and that this happiness was in every one's power.

Rasselas listened to him with the veneration due to the instructions of a superior being, and waiting for him at the door, humbly implored the liberty of visiting so great a master of true wisdom. The lecturer hesitated a moment, when Rasselas put a purse of gold into his hand, which he received with a mixture of joy and wonder.

"I have found," said the prince, at his return to Imlac, "a man who can teach all that is necessary to be known, who, from the unshaken throne of rational fortitude looks down on the scenes of life changing beneath him. He speaks, and attention watches his lips. He reasons, and conviction closes his periods. This man shall be my future guide: I will learn his doctrines, and imitate his life."

"Be not too hasty," said Imlac, "to trust, or to admire, the teachers of morality; they discourse like angels, but they live like men."

Rasselas, who could not conceive how any man could reason so forcibly without feeling the cogency of his own arguments, paid his visit in a few days, and was denied admission. He had now learned the power of money, and made his way by a piece of gold to the inner apartment, where he found the philosopher in a room half darkened, with his eyes misty, and his face pale. "Sir," said he, "you are come at a time when all human friendship is useless; what I suffer cannot be remedied, what I have lost cannot be supplied. My daughter, my only daughter, from whose tenderness I expected all the comforts of my age, died last night of a fever. My views, my purposes, my hopes are at an end. I am now a lonely being disunited from society."

"Sir," said the prince, "mortality is an event by which a wise man can never be surprised: we know that death is always near, and it should therefore always be expected." "Young man," answered the philosopher, "you speak like one that has never felt the pangs of separation." "Have you then forgot the precepts," said Rasselas, "which you so powerfully enforced? Has wisdom no strength to arm the heart against calamity? Consider that external things are naturally variable, but truth and reason are always the same." "What comfort," said the mourner, "can truth and reason afford me? of what effect are they now, but to tell me that my daughter will not be restored?"

The prince, whose humanity would not suffer him to insult misery with reproof, went away convinced of the emptiness of rhetorical sound, and the inefficacy of polished periods and studied sentences.

CHAP. XIX.

A GLIMPSE OF PASTORAL LIFE.

HE was still eager upon the same inquiry; and having heard of a hermit that lived near the lowest cataract of the Nile, and filled the whole country with the fame of his sanctity, resolved to visit his retreat, and inquire whether that felicity, which public life could not afford, was to be found in solitude; and whether a man, whose age and virtue made him venerable, could teach any peculiar art of shunning evils, or enduring them?

Imlac and the princess agreed to accompany him, and, after the necessary preparations, they began their journey. Their way lay through the fields, where shepherds tended their flocks, and the lambs were playing upon the pasture. "This," said the poet, "is the life which has been often celebrated for its innocence and quiet; let us pass the heat of the day among the shepherd's tents, and know whether all our searches are not to terminate in pastoral simplicity."

The proposal pleased them, and they induced the shepherds, by small presents and familiar questions, to tell their opinion of their own state. They were so rude and ignorant, so little able to compare the good with the evil of the occupation, and so indistinct in their narratives and descriptions, that very little could be learned from them. But it was evident that their hearts were cankered with discontent; that they considered themselves as condemned to labour for the luxury of the rich, and looked up with stupid malevolence toward those that were placed above them.

The princess pronounced with vehemence, that she would never suffer these envious savages to be her companions, and that she should not soon be desirous of seeing any more specimens of rustic happiness; but could not believe that all the accounts of primeval pleasures were fabulous; and was yet in doubt, whether life had anything that could be justly preferred to the placid gratifications of fields and woods. She hoped that the time would come, when, with a few virtuous and elegant companions, she should gather flowers planted by her own hand, fondle the lambs of her own ewe, and listen, without care, among brooks and breezes, to one of her maidens reading in the shade.

CHAP. XX.

THE DANGER OF PROSPERITY.

ON the next day they continued their journey, till the heat compelled them to look round for shelter. At a small distance they saw a thick wood, which they no sooner entered than they perceived that they were approaching the habitations of men. The shrubs were diligently cut

away to open walks where the shades were darkest; the boughs of opposite trees were artificially interwoven; seats of flowery turf were raised in vacant spaces, and a revulet that wantoned along the side of a winding path, had its banks sometimes opened into small basins, and its stream sometimes obstructed by little mounds of stone heaped together to increase its murmurs.

They passed slowly through the wood, delighted with such unexpected accommodations, and entertained each other with conjecturing what, or who, he could be, that, in those rude and unfrequented regions, had leisure and art for such harmless luxury.

As they advanced they heard the sound of music and saw youths and virgins dancing in the grove; and, going still further, beheld a stately palace built upon a hill surrounded with woods. The laws of eastern hospitality allowed them to enter, and the master welcomed them like a man liberal and wealthy.

He was skilful enough in appearances soon to discern that they were no common guests, and spread his table with magnificence. The eloquence of Imlac caught his attention, and the lofty courtesy of the princess excited his respect. When they offered to depart, he entreated their stay, and was the next day still more unwilling to dismiss them than before. They were easily persuaded to stop, and civility grew up in time to freedom and confidence.

The prince now saw all the domestics cheerful and all the face of nature smiling round the place, and could not forbear to hope that he should find here what he was seeking; but when he was congratulating the master upon his possessions, he answered with a sigh, "My condition has indeed the appearance of happiness, but appearances are delusive. My prosperity puts my life in danger; the Bassa of Egypt is my enemy, incensed only by my wealth and popularity. I have been hitherto protected against him by the princes of the country; but, as the favour of the great is uncertain, I know not how soon my defenders may be persuaded to share the plunder with the Bassa. I have sent my treasures into a distant country, and, upon the first alarm, am prepared to follow them. Then will my enemies riot in my mansion, and enjoy the gardens which I have planted."

They all joined in lamenting his danger, and deprecating his exile: and the princess was so much disturbed with the tumult of grief and indignation that she retired to her apartment. They continued with their kind inviter a few days longer, and then went forward to find the hermit.

CHAP. XXI.

THE HAPPINESS OF SOLITUDE. THE HERMIT'S HISTORY.

THEY came on the third day, by the direction of the peasants, to the hermit's cell: it was a cavern in the side of a mountain, overshadowed with palm trees; at such a distance from the cataract that nothing more was heard than a gentle uniform murmur, such as composed the mind

to pensive meditation, especially when it was assisted by the wind whistling among the branches. The first rude essay of nature had been so much improved by human labour, that the cave contained several apartments appropriated to different uses, and often afforded lodging to travellers, whom darkness or tempests happened to overtake.

The hermit sat on a bench at the door, to enjoy the coolness of the evening. On one side lay a book with pens and papers, on the other mechanical instruments of various kinds. As they approached him unregarded, the princess observed that he had not the countenance of a man that had found, or could teach the way to happiness.

They saluted him with great respect, which he repaid like a man not unaccustomed to the forms of courts. "My children," said he "if you have lost your way, you shall be willingly supplied with such conveniences for the night as this cavern will afford. I have all that nature requires, and you will not expect delicacies in a hermit's cell.

They thanked him, and, entering, were pleased with the neatness and regularity of the place. The hermit set flesh and wine before them, though he fed only upon fruits and water. His discourse was cheerful without levity, and pious without enthusiasm. He soon gained the esteem of his guests, and the princess repented of her hasty censure.

At last Imlac began thus: "I do not now wonder that your reputation is so far extended, we have heard at Cairo of your wisdom, and came hither to implore your direction for this young man and maiden in the *choice of life*."

"To him that lives well," answered the hermit, "every form of life is good; nor can I give any other rule for choice than to remove from all apparent evil."

"He will remove most certainly from evil," said the prince, "who shall devote himself to that solitude which you have recommended by your example."

"I have indeed lived fifteen years in solitude," said the hermit, "but have no desire that my example should gain any imitators. In my youth I professed arms, and was raised by degrees to the highest military rank. I have traversed wide countries at the head of my troops, and seen many battles and sieges. At last, being disgusted by the preferments of a younger officer, and feeling that my vigour was beginning to decay, I resolved to close my life in peace, having found the world full of snares, discord, and misery. I had once escaped from the pursuit of the enemy by the shelter of this cavern, and therefore chose it for my final residence. I employed artificers to form it into chambers, and stored it with all that I was likely to want.

"For some time after my retreat, I rejoiced like a tempest-beaten sailor at his entrance into the harbour, being delighted with the sudden change of the noise and hurry of war to stillness and repose. When the pleasure of novelty went away, I employed my hours in examining the plants which grew in the valley, and the minerals which I collected from the rocks. But that inquiry is now grown tasteless and irksome. I have been for some time unsettled and distracted: my mind is disturbed with a thousand perplexities of doubt, and vanities of imagination

which hourly prevail upon me, because I have no opportunities of relaxation or diversion. I am sometimes ashamed to think that I could not secure myself from vice, but by retiring from the exercise of virtue, and begin to suspect that I was rather impelled by resentment, than led by devotion, into solitude. My fancy riots in scenes of folly, and I lament that I have lost so much, and have gained so little. In solitude, if I escape the example of bad men, I want likewise the counsel and conversation of the good. I have been long comparing the evils with the advantages of society, and resolve to return into the world to-morrow. The life of a solitary man will be certainly miserable, but not certainly devout."

They heard his resolution with surprise, but after a short pause offered to conduct him to Cairo. He dug up a considerable treasure which he had hid among the rocks, and accompanied them to the city, on which, as he approached it, he gazed with rapture.

CHAP. XXII.

THE HAPPINESS OF A LIFE LED ACCORDING TO NATURE.

RASSELAS went often to an assembly of learned men, who met at stated times to unbend their minds, and compare their opinions. Their manners were somewhat coarse, but their conversation was instructive, and their disputations acute, though sometimes too violent, and often continued till neither controvertist remembered upon what question they began. Some faults were almost general among them; every one was desirous to dictate to the rest, and every one was pleased to hear the genius or knowledge of another depreciated.

In this assembly Rasselas was relating his interview with the hermit, and the wonder with which he heard him censure a course of life which he had so deliberately chosen, and so laudably followed. The sentiments of the hearers were various. Some were of opinion that the folly of his choice had been justly punished by condemnation to perpetual perseverance. One of the youngest among them, with great vehemence, pronounced him an hypocrite. Some talked of the right of society to the labour of individuals, and considered retirement as a desertion of duty. Others readily allowed, that there was a time when the claims of the public were satisfied, and when a man might properly sequester himself, to review his life and purify his heart.

One, who appeared more affected with the narrative than the rest, thought it likely that the hermit would in a few years, go back to his retreat, and, perhaps, if shame did not restrain, or death intercept him, return once more from his retreat into the world: "For the hope of happiness," said he, "is so strongly impressed, that the longest experience is not able to efface it. Of the present state, whatever it be, we feel, and are forced to confess, the misery; yet, when the same state is again at a distance, imagination paints it as desirable. But the time will surely come, when desire will be no longer our torment, and no man shall be wretched but by his own fault."

"This," said a philosopher, who had heard him with tokens of great impatience, "is the present condition of a wise man. The time is already come, when none are wretched but by their own fault. Nothing is more idle than to inquire after happiness, which nature has kindly placed within our reach. The way to be happy is to live according to nature, in obedience to that universal and unalterable law with which every heart is originally impressed; which is not written on it by precept, but engraven by destiny, not instilled by education, but infused at our nativity. He that lives according to nature, will suffer nothing from the delusions of hope, or importunities of desire: he will receive and reject with equability of temper; and act or suffer as the reason of things shall alternately prescribe. Other men may amuse themselves with subtle definitions, or intricate ratiocinations. Let them learn to be wise by easier means: let them observe the hind of the forest, and the linnet of the grove: let them consider the life of animals, whose motions are regulated by instinct; they obey their guide, and are happy. Let us therefore, at length, cease to dispute, and learn to live; throw away the incumbrance of precepts, which they who utter them with so much pride and pomp do not understand, and carry with us this simple and intelligible maxim, 'That deviation from nature is deviation from happiness.'"

When he had spoken, he looked round him with a placid air, and enjoyed the consciousness of his own beneficence. "Sir," said the prince, with great modesty, "as I, like all the rest of mankind, am desirous of felicity, my closest attention has been fixed upon your discourse: I doubt not the truth of a position which a man so learned has so confidently advanced. Let me only know what it is to live according to nature?"

"When I find young men so humble and so docile," said the philosopher, "I can deny them no information which my studies have enabled me to afford. To live according to nature, is to act always with due regard to the fitness arising from the relations and qualities of causes and effects: to concur with the great and unchangeable scheme of universal felicity; to co-operate with the general disposition and tendency of the present system of things."

The prince soon found that this was one of the sages whom he should understand less as he heard him longer. He therefore bowed and was silent; and the philosopher, supposing him satisfied, and the rest vanquished rose up and departed with the air of a man that had co-operated with the present system.

CHAP. XXIII.

THE PRINCE AND HIS SISTER DIVIDE BETWEEN THEM THE WORK OF OBSERVATION.

RASSELAS returned home full of reflections, doubtful how to direct his future steps. Of the way to happiness he found the learned and simple equally ignorant; but, as he was yet young, he flattered himself that he had time remaining for more experiments, and further inquiries.

He communicated to Imlac his observations and his doubts, but was answered by him with new doubts, and remarks that gave him no comfort. He therefore discoursed more frequently and freely with his sister, who had yet the same hope with himself and always assisted him to give some reason why, though he had been hitherto frustrated, he might succeed at last.

"We have hitherto," said she, "known but little of the world; we have never yet been either great or mean. In our own country, though we had royalty, we had no power, and in this we have not yet seen the private recesses of domestic peace. Imlac favours not our search, lest we should in time find him mistaken. We will divide the task between us: you shall try what is to be found in the splendour of courts, and I will range the shades of humbler life. Perhaps command and authority may be the supreme blessings, as they afford most opportunities of doing good; or, perhaps, what this world can give may be found in the modest habitations of middle fortune; too low for great designs, and too high for penury and distress."

CHAP. XXIV.

THE PRINCE EXAMINES THE HAPPINESS OF HIGH STATIONS.

RASSELAS applauded the design, and appeared next day with a splendid retinue at the court of the Bassa. He was soon distinguished for his magnificence, and admitted, as a prince whose curiosity had brought him from distant countries, to an intimacy with the great officers, and frequent conversation with the Bassa himself.

He was at first inclined to believe, that the man must be pleased with his own condition whom all approached with reverence, and heard with obedience, and who had the power to extend his edicts to a whole kingdom. "There can be no pleasure," said he, "equal to that of feeling at once the joy of thousands all made happy by wise administration. Yet, since by the law of subordination this sublime delight can be in one nation but the lot of one, it is surely reasonable to think that there is some satisfaction more popular and accessible, and that millions can hardly be subjected to the will of a single man only to fill his particular breast with incommunicable content."

These thoughts were often in his mind, and he found no solution of the difficulty. But as presents and civilities gained him more familiarity, he found that almost every man who stood high in employment hated all the rest, and was hated by them, and that their lives were a continual succession of plots and detections, stratagems and escapes, faction and treachery. Many of those who surrounded the Bassa, were sent only to watch and report his conduct; every tongue was muttering censure, and every eye was searching for a fault.

At last the letters of revocation arrived, the Bassa was carried in chains to Constantinople, and his name was mentioned no more.

"What are we now to think of the prerogatives of power," said

Rasselas to his sister; "is it without any efficacy to good? or, is the subordinate degree only dangerous, and the supreme safe and glorious? Is the Sultan the only happy man in his dominions? or, is the Sultan himself subject to the torments of suspicion and the dread of enemies?"

In a short time the second Bassa was deposed. The Sultan that had advanced him was murdered by the Janizaries, and his successor had other views and different favourites.

CHAP. XXV.

THE PRINCESS PURSUES HER INQUIRY WITH MORE DILIGENCE THAN SUCCESS.

THE princess, in the meantime, insinuated herself into many families; for there are few doors through which liberality, joined with good humour, cannot find its way. The daughters of many houses were airy and cheerful, but Nekayah had been too long accustomed to the conversation of Imlac and her brother, to be much pleased with childish levity, and prattle which had no meaning. She found their thoughts narrow, their wishes low, and their merriment often artificial. Their pleasures, poor as they were, could not be preserved pure, but were embittered by petty competitions and worthless emulation. They were always jealous of the beauty of each other; of a quality to which solitude can add nothing, and from which detraction can take nothing away. Many were in love with triflers like themselves, and many fancied that they were in love when in truth they were only idle. Their affection was not fixed on sense or virtue, and therefore seldom ended but in vexation. Their grief, however, like their joy, was transient; every thing floated in their mind unconnected with the past or future, so that one desire easily gave way to another, as a second stone cast into the water effaces and confounds the circles of the first.

With these girls she played as with inoffensive animals, and found them proud of their countenance, and weary of her company.

But her purpose was to examine more deeply, and her affability easily persuaded the hearts that were swelling with sorrow to discharge their secrets in her ear; and those whom hope flattered, or prosperity delighted, often courted her to partake their pleasures.

The princess and her brother commonly met in the evening in a private summer-house on the bank of the Nile, and related to each other the occurrences of the day. As they were sitting together, the princess cast her eyes upon the river that flowed before her. "Answer," said she, "great father of waters, thou that rollest thy floods through eighty nations, to the invocations of the daughter of thy native king. Tell me if thou waterest through all thy course a single habitation from which thou dost not hear the murmurs of complaint?"

"You are then," said Rasselas, "not more successful in private houses than I have been in courts." "I have, since the last partition of our provinces," said the princess, "enabled myself to enter familiarly into many families, where there was the fairest show of prosperity

and peace, and know not one house that is not haunted by some fury that destroys their quiet.

“ I did not seek ease among the poor, because I concluded that there it could not be found. But I saw many poor, whom I had supposed to live in affluence. Poverty has, in large cities, very different appearances: it is often concealed in splendour, and often in extravagance. It is the care of a very great part of mankind to conceal their indigence from the rest; they support themselves by temporary expedients, and every day is lost in contriving for the morrow.

“ This, however, was an evil, which, though frequent, I saw with less pain, because I could relieve it. Yet some have refused my bounties; more offended with my quickness to detect their wants than pleased with my readiness to succour them: and others, whose exigencies compelled them to admit my kindness, have never been able to forgive their benefactress. Many, however, have been sincerely grateful, without the ostentation of gratitude, or the hope of other favours.”

CHAP. XXVI.

THE PRINCESS CONTINUES HER REMARKS UPON PRIVATE LIFE.

NEKAYAH, perceiving her brother's attention fixed, proceeded in her narrative.

“ In families, where there is or is not poverty, there is commonly discord; if a kingdom be, as Imlac tells us, a great family, a family likewise is a little kingdom, torn with factions and exposed to revolutions. An unpractised observer expects the love of parents and children to be constant and equal; but this kindness seldom continues beyond the years of infancy: in a short time the children become rivals to their parents. Benefits are allayed by reproaches, and gratitude debased by envy.

“ Parents and children seldom act in concert; each child endeavours to appropriate the esteem or fondness of the parents, and the parents, with yet less temptation, betray each other to their children; thus some place their confidence in the father, and some in the mother, and by degrees the house is filled with artifices and feuds.

“ The opinions of children and parents, of the young and the old, are naturally opposite, by the contrary effects of hope and despondence, of expectation and experience, without crime or folly on either side. The colours of life in youth and age appear different, as the face of nature in spring and winter. And how can children credit the assertions of parents, which their own eyes show them to be false?

“ Few parents act in such a manner as much to enforce their maxims by the credit of their lives. The old man trusts wholly to slow contrivance and gradual progressions: the youth expects to force his way by genius, vigour, and precipitance. The old man pays regard to riches, and the youth reverences virtue. The old man deifies prudence; the youth commits himself to magnanimity and chance. The young man, who intends no ill, believes that none is intended, and therefore acts with openness and candour; but his father, having suffered the in-

juries of fraud, is impelled to suspect, and too often allured to practise it. Age looks with anger on the temerity of youth, and youth with contempt on the scrupulosity of age. Thus parents and children, for the greatest part, live on to love less and less : and, if those whom nature has thus closely united are the torments of each other, where shall we look for tenderness and consolation ?”

“Surely,” said the prince, “you must have been unfortunate in your choice of acquaintance : I am unwilling to believe that the most tender of all relations is thus impeded in its effects by natural necessity.”

“Domestic discord,” answered she, “is not inevitable and fatally necessary ; but yet it is not easily avoided. We seldom see that a whole family is virtuous : the good and evil cannot well agree ; and the evil can yet less agree with one another : even the virtuous fall sometimes to variance, when their virtues are of different kinds and tending to extremes. In general, those parents have most reverence that most deserve it : for he that lives well cannot be despised.

“Many other evils infest private life. Some are the slaves of servants whom they have trusted with their affairs. Some are kept in continual anxiety by the caprice of rich relations, whom they cannot please and dare not offend. Some husbands are imperious, and some wives perverse : and, as it is always more easy to do evil than good, though the wisdom or virtue of one can very rarely make many happy, the folly or vice of one may often make many miserable.”

“If such be the general effect of marriage,” said the prince, “I shall, for the future, think it dangerous to connect my interest with that of another, lest I should be unhappy by my partner’s fault.”

“I have met,” said the princess, “with many who live single for that reason ; but I never found that their prudence ought to raise envy. They dream away their time without friendship, without fondness, and are driven to rid themselves of the day, for which they have no use, by childish amusements or vicious delights. They act as beings under the constant sense of some known inferiority, that fills their minds with rancour, and their tongues with censure. They are peevish at home, and malevolent abroad ; and, as the outlaws of human nature, make it their business and their pleasure to disturb that society which debars them from its privileges. To live without feeling or exciting sympathy, to be fortunate without adding to the felicity of others, or afflicted without tasting the balm of pity, is a state more gloomy than solitude ; it is not retreat, but exclusion from mankind. Marriage has many pains, but celibacy has no pleasures.”

“What then is to be done ?” said Rasselas ; “the more we inquire, the less we can resolve. Surely he is most likely to please himself that has no other inclination to regard.”

CHAP. XXVII.

DISQUISITION UPON GREATNESS.

THE conversation had a short pause. The prince, having considered his sister’s observations, told her, that she had surveyed life with

prejudice, and supposed misery where she did not find it. "Your narrative," said he, "throws yet a darker gloom upon the prospects of futurity: the predictions of Imlac were but faint sketches of the evils painted by Nekayah: I have been lately convinced that quiet is not the daughter of grandeur or of power: that her presence is not to be bought by wealth, nor enforced by conquest. It is evident, that as any man acts in a wider compass, he must be more exposed to opposition from enmity, or miscarriage from chance; whoever has many to please or to govern, must use the ministry of many agents, some of whom will be wicked, and some ignorant; by some he will be misled, and by others betrayed. If he gratifies one, he will offend another: those that are not favoured will think themselves injured; and, since favours can be conferred but upon few, the greater number will be always discontented."

"The discontent," said the princess, "which is thus unreasonable, I hope that I shall always have spirit to despise, and you, power to repress."

"Discontent," answered Rasselas, "will not always be without reason under the most just and vigilant administration of public affairs. None, however attentive, can always discover that merit, which indigence or faction may happen to obscure: and none, however powerful, can always reward it. Yet he that sees inferior desert advanced above him will naturally impute that preference to partiality or caprice: and, indeed, it can scarcely be hoped that any man, however magnanimous by nature, or exalted by condition, will be able to persist for ever in the fixed and inexorable justice of distribution: he will sometime, indulge his own affections, and sometimes those of his favourites; he will permit some to please him who can never serve him; he will discover in those whom he loves, qualities which in reality they do not possess; and to those, from whom he receives pleasure, he will in his turn endeavour to give it. Thus will recommendations sometimes prevail, which were purchased by money, or by the more destructive bribery of flattery and servility."

"He that has much to do will do something wrong; and of that wrong must suffer the consequences; and if it were possible that he should always act rightly, yet when such numbers are to judge of his conduct, the bad will censure and obstruct him by malevolence, and the good sometimes by mistake."

"The highest stations cannot therefore hope to be the abodes of happiness, which I would willingly believe to have fled from thrones and palaces to seats of humble privacy and placid obscurity. For what can hinder the satisfaction, or intercept the expectations of him whose abilities are adequate to his employments, who sees with his own eyes the whole circuit of his influence, who chooses by his own knowledge all whom he trusts, and whom none are tempted to deceive by hope or fear? Surely he has nothing to do but to love and to be loved, to be virtuous and to be happy."

"Whether perfect happiness would be procured by perfect goodness," said Nekayah, "this world will never afford an opportunity of deciding. But this, at least, may be maintained, that we do not always

find visible happiness in proportion to visible virtue. All natural, and almost all political, evils are incident alike to the bad and good : they are confounded in the misery of a famine, and not much distinguished in the fury of a faction ; they sink together in a tempest, and are driven together from their country by invaders. All their virtue can afford is quietness of conscience, a steady prospect of a happier state ; this may enable us to endure calamity with patience ; but remember, that patience must suppose pain."

CHAP. XXVIII.

RASSELAS AND NEKAYAH CONTINUE THEIR CONVERSATION.

"DEAR princess," said Rasselas, "you fall into the common errors of exaggeratory declamation, by producing, in a familiar disquisition, examples of national calamities, and scenes of extensive misery, which are found in books rather than in the world, and which, as they are horrid, are ordained to be rare. Let us not imagine evils which we do not feel, nor injure life by misrepresentations. I cannot bear that querulous eloquence which threatens every city with a siege like that of Jerusalem, that makes famine attend on every flight of locusts, and suspends pestilence on the wing of every blast that issues from the south.

"On necessary and inevitable evils, which overwhelm kingdoms at once, all disputation is vain : when they happen they must be endured. But it is evident, that these bursts of universal distress are more dreaded than felt ; thousands and ten thousands flourish in youth, and wither in age, without the knowledge of any other than domestic evils, and share the same pleasures and vexations, whether their kings are mild or cruel, whether the armies of their country pursue their enemies or retreat before them. While courts are disturbed with intestine competitions, and ambassadors are negotiating in foreign countries, the smith still plies his anvil, and the husbandman drives his plough forward ; the necessaries of life are required and obtained ; and the successive business of the seasons continues to make its wonted revolutions.

"Let us cease to consider what, perhaps, may never happen, and what, when it shall happen, will laugh at human speculation. We will not endeavour to modify the motions of the elements, or to fix the destiny of kingdoms. It is our business to consider what beings like us may perform ; each labouring for his own happiness, by promoting within his circle, however narrow, the happiness of others.

"Marriage is evidently the dictate of nature ; men and women are made to be companions of each other, and therefore I cannot be persuaded but that marriage is one of the means of happiness."

"I know not," said the princess, "whether marriage be more than one of the innumerable modes of human misery. When I see and reckon the various forms of connubial infelicity, the unexpected causes of lasting discord, the diversities of temper, the oppositions of opinion, the rude collisions of contrary desire where both are urged by violent impulses, the obstinate contests of disagreeable virtues where both are

supported by consciousness of good intention, I am sometimes disposed to think with the severer casuists of most nations, that marriage is rather permitted than approved, and that none, but by the instigation of a passion too much indulged, entangle themselves with indissoluble compacts."

"You seem to forget," replied Rasselas, "that you have, even now, represented celibacy as less happy than marriage. Both conditions may be bad, but they cannot both be worst. Thus it happens when wrong opinions are entertained, that they mutually destroy each other, and leave the mind open to truth."

"I did not expect," answered the princess, "to hear that imputed to falsehood which is the consequence only of frailty. To the mind as to the eye, it is difficult to compare with exactness objects vast in their extent, and various in their parts. Where we see or conceive the whole at once, we readily note the discriminations, and decide the preference: but of two systems, of which neither can be surveyed by any human being in its full compass of magnitude and multiplicity of complication, where is the wonder that, judging of the whole by parts, I am alternately affected by one and the other as either presses on my memory or fancy? We differ from ourselves just as we differ from each other, when we see only part of the question, as in the multifarious relations of politics and morality: but when we perceive the whole at once, as in numerical computations, all agree in one judgment, and none ever varies his opinion."

"Let us not add," said the prince, "to the other evils of life the bitterness of controversy, nor endeavour to vie with each other in subtleties of argument. We are employed in a search of which both are equally to enjoy the success, or suffer by the miscarriage. It is therefore fit that we assist each other. You surely conclude too hastily from the infelicity of marriage against its institution; will not the misery of life prove equally that life cannot be the gift of heaven? The world must be peopled by marriage, or peopled without it."

"How the world is to be peopled," returned Nekayah, "is not my care, and needs not be yours. I see no danger that the present generation should omit to leave successors behind them: we are not now inquiring for the world but for ourselves."

CHAP. XXIX.

THE DEBATE OF MARRIAGE CONTINUED.

"THE good of the whole," said Rasselas, "is the same with the good of all its parts. If marriage be best for mankind, it must be evidently best for individuals, or a permanent and necessary duty must be the cause of evil, and some must be inevitably sacrificed to the convenience of others. In the estimate which you have made of the two states, it appears that the incommodities of a single life are, in a great measure, necessary and certain, but those of the conjugal state accidental and avoidable.

"I cannot forbear to flatter myself, that prudence and benevolence will make marriage happy. The general folly of mankind is the cause-

of general complaint. What can be expected but disappointment and repentance from a choice made in the immaturity of youth, in the ardour of desire, without judgment, without foresight, without inquiry after conformity of opinions, similarity of manners, rectitude of judgment, or purity of sentiment?

“Such is the common process of marriage. A youth and maiden meeting by chance, or brought together by artifice, exchange glances, reciprocate civilities, go home, and dream of one another. Having little to divert attention, or diversify thought, they find themselves uneasy when they are apart, and therefore conclude that they shall be happy together. They marry, and discover what nothing but voluntary blindness before had concealed; they wear out life in altercations, and charge nature with cruelty.

“From those early marriages proceeds likewise the rivalry of parents and children: the son is eager to enjoy the world before the father is willing to forsake it, and there is hardly room at once for two generations. The daughter begins to bloom before the mother can be content to fade, and neither can forbear to wish for the absence of the other.

“Surely all these evils may be avoided by that deliberation and delay which prudence prescribes to irrevocable choice. In the variety and jollity of youthful pleasures life may be well enough supported without the help of a partner. Longer time will increase experience, and wider views will allow better opportunities of inquiry and selection: one advantage, at least, will be certain; the parents will be visibly older than their children,”

“What reason cannot collect,” said Nekayah, “and what experiment has not yet taught, can be known only from the report of others. I have been told that late marriages are not eminently happy. This is a question too important to be neglected, and I have often proposed it to those whose accuracy of remark and comprehensiveness of knowledge made their suffrages worthy of regard. They have generally determined that it is dangerous for a man and woman to suspend their fate upon each other at a time when opinions are fixed and habits are established; when friendships have been contracted on both sides, when life has been planned into method, and the mind has long enjoyed the contemplation of its own prospects.

“It is scarcely possible that two, travelling through the world, under the conduct of chance, should have been both directed to the same path, and it will not often happen that either will quit the track which custom has made pleasing. When the desultory levity of youth has settled into regularity, it is soon succeeded by pride ashamed to yield, or obstinacy delighting to contend. And even though mutual esteem produces mutual desire to please, time itself, as it modifies unchangeably the external mien, determines likewise the direction of the passions, and gives an inflexible rigidity to the manners. Long customs are not easily broken: he that attempts to change the course of his own life very often labours in vain; and how shall we do that for others, which we are seldom able to do for ourselves?”

"But surely," interposed the prince, "you suppose the chief motive of choice forgotten or neglected. Whenever I shall seek a wife, it shall be my first question, whether she be willing to be led by reason?"

"Thus it is," said Nekayah, "that philosophers are deceived. There are a thousand familiar disputes which reason never can decide: questions that elude investigation, and make logic ridiculous; cases where something must be done, and where little can be said. Consider the state of mankind, and inquire how few can be supposed to act upon any occasions, whether small or great, with all the reasons of action present to their minds. Wretched would be the pair above all names of wretchedness, who should be doomed to adjust by reason, every morning, all the minute detail of a domestic day.

"Those who marry at an advanced age, will probably escape the encroachments of their children; but, in diminution of this advantage, they will be likely to leave them, ignorant and helpless, to a guardian's mercy: or, if that should not happen, they must at least go out of the world before they see those whom they love best either wise or great.

"From their children, if they have less to fear, they have less also to hope; and they lose, without equivalent, the joys of early love, and the convenience of uniting with manners pliant, and minds susceptible of new impressions, which might wear away their dissimilarities by long cohabitation, as soft bodies, by continual attrition, conform their surfaces to each other.

"I believe it will be found that those who marry late are best pleased with their children, and those who marry early with their partners."

"The union of these two affections," said Rasselas, "would produce all that could be wished. Perhaps there is a time when marriage might unite them; a time neither too early for the father nor too late for the husband."

"Every hour," answered the princess, "confirms my prejudice in favour of the position so often uttered by the mouth of Imlac, 'That nature sets her gifts on the right hand and on the left.' Those conditions which flatter hope and attract desire are so constituted, that as we approach one we recede from another. There are goods so opposed that we cannot seize both, but, by too much prudence, may pass between them at too great a distance to reach either. This is often the fate of long consideration; he does nothing who endeavours to do more than is allowed to humanity. Flatter not yourself with contraries of pleasure. Of the blessings set before you make your choice and be content. No man can taste the fruits of autumn while he is delighting his scent with the flowers of the spring: no man can, at the same time, fill his cup from the source and from the mouth of the Nile."

CHAP. XXX.

IMLAC ENTERS, AND CHANGES THE CONVERSATION.

HERE Imlac entered, and interrupted them, "Imlac," said Rasselas, "I have been taking from the princess the dismal history of private life, and am almost discouraged from further search."

"It seems to me," said Imlac, "that while you are making the choice of life you neglect to live. You wander about a single city, which, however large and diversified, can now afford few novelties, and forget that you are in a country famous among the earliest monarchies for the power and wisdom of its inhabitants; a country where the sciences first dawned that illuminate the world, and beyond which the arts cannot be traced of civil society or domestic life.

"The old Egyptians have left behind them monuments of industry and power, before which all European magnificence is confessed to fade away. The ruins of their architecture are the schools of modern builders, and from the wonders which time has spared, we may conjecture, though uncertainly, what it has destroyed."

"My curiosity," said Rasselas, "does not very strongly lead me to survey piles of stone or mounds of earth; my business is with man. I came hither not to measure fragments of temples, or trace choked aqueducts, but to look upon the various scenes of the present world."

"The things that are now before us," said the princess, "require attention and deserve it. What have I to do with the heroes or the monuments of ancient times? with times which never can return, and heroes, whose form of life was different from all that the present condition of mankind requires or allows?"

"To know any thing," returned the poet, "we must know its effects; to see men we must see their works, that we may learn what reason has dictated, or passion has incited, and find what are the most powerful motives of action. To judge rightly of the present, we must oppose it to the past; for all judgment is comparative, and of the future nothing can be known. The truth is, that no mind is much employed upon the present: recollection and anticipation fill up almost all our moments. Our passions are joy and grief, love and hatred, hope and fear. Of joy and grief the past is the object, and the future of hope and fear; even love and hatred respect the past, for the cause must have been before the effect. "The present state of things is the consequence of the former, and it is natural to inquire what were the sources of the good that we enjoy, or the evil that we suffer. If we act only for ourselves, to neglect the study of history is not prudent: if we are intrusted with the care of others, it is not just. Ignorance, when it is voluntary, is criminal; and he may properly be charged with evil who refused to learn how he might prevent it.

"There is no part of history so generally useful as that which relates the progress of the human mind, the gradual improvement of reason, the successive advances of science, the vicissitudes of learning and ignorance, which are the light and darkness of thinking beings; the extinction and resuscitation of arts, and the revolutions of the intellectual world. If accounts of battles and invasions are peculiarly the business of princes, the useful or elegant arts are not to be neglected; those who have kingdoms to govern have understandings to cultivate.

"Example is always more efficacious than precept. A soldier is formed in war, and a painter must copy pictures. In this, contemplative life has the advantage: great actions are seldom seen, but the

labours of art are always at hand for those who desire to know what art has been able to perform.

"When the eye or the imagination is struck with any uncommon work, the next transition of an active mind is to the means by which it was performed. Here begins the true use of such contemplation; we enlarge our comprehension by new ideas, and perhaps recover some art lost to mankind, or learn what is less perfectly known in our own country. At least we compare our own with former times, and either rejoice at our improvements, or, what is the first motion towards good, discover our defects."

"I am willing," said the prince, "to see all that can deserve my search." "And I," said the princess, "shall rejoice to learn something of the manners of antiquity."

"The most pompous monument of Egyptian greatness, and one of the most bulky works of manual industry," said Imlac, "are the pyramids; fabrics raised before the time of history, and of which the earliest narratives afford us only uncertain traditions. Of these the greatest is still standing, very little injured by time."

"Let us visit them to-morrow," said Nekayah. "I have often heard of the Pyramids, and shall not rest till I have seen them within and without with my own eyes."

CHAP. XXXI.

THEY VISIT THE PYRAMIDS.

THE resolution being thus taken, they set out the next day. They laid tents upon their camels, being resolved to stay among the Pyramids till their curiosity was fully satisfied. They travelled gently, turned aside to every thing remarkable, stopped from time to time and conversed with the inhabitants, and observed the various appearances of towns ruined and inhabited, of wild and cultivated nature.

When they came to the great Pyramid, they were astonished at the extent of the base and the height of the top. Imlac explained to them the principles upon which the pyramidal form was chosen for a fabric intended to co-extend its duration with that of the world: he showed that its gradual diminution gave it such stability, as defeated all the common attacks of the elements, and could scarcely be overthrown by earthquakes themselves, the least resistable of natural violence. A concussion that should shatter the Pyramid would threaten the dissolution of the continent.

They measured all its dimensions, and pitched their tents at its foot. Next day they prepared to enter its interior apartments; and, having hired the common guides, climbed up to the first passage, when the favourite of the princess, looking into the cavity, stepped back and trembled. "Pekuah," said the princess, "of what art thou afraid?" "Of the narrow entrance," answered the lady, "and of the dreadful gloom. I dare not enter a place which must surely be inhabited by unquiet souls. The original possessors of those dreadful vaults will start up before us, and perhaps shut us in for ever." She spoke, and threw her arms round the neck of her mistress.

"If all your fear be of apparitions," said the prince, "I will promise you safety: there is no danger from the dead; he that is once buried will be seen no more."

"That the dead are seen no more," said Imlac, "I will not undertake to maintain against the concurrent and unvaried testimony of all ages and of all nations. There is no people, rude or learned, among whom apparitions of the dead are not related and believed. This opinion, which perhaps prevails as far as human nature is diffused, could become universal only by its truth: those that never heard of one another would not have agreed in a tale which nothing but experience can make credible. That it is doubted by single cavillers, can very little weaken the general evidence; and some who deny it with their tongues confess it by their fears."

"Yet I do not mean to add new terrors to those which have already seized upon Pekuah. There can be no reason why spectres should haunt the Pyramid more than other places, or why they should have power or will to hurt innocence and purity. Our entrance is no violation of their privileges; we can take nothing from them, how then can we offend them?"

"My dear Pekuah," said the princess, "I will always go before you, and Imlac shall follow you. Remember that you are the companion of the princess of Abyssinia."

"If the princess is pleased that her servant should die," returned the lady, "let her command some death less dreadful than enclosure in this horrid cavern. You know I dare not disobey you: I must go if you command me; but, if I once enter, I never shall come back."

The princess saw that her fear was too strong for expostulation or reproof; and, embracing her, told her that she should stay in the tent till their return. Pekuah was yet not satisfied, but entreated the princess not to pursue so dreadful a purpose as that of entering the recesses of the Pyramid. "Though I cannot teach courage," said Nekayah, "I must not learn cowardice; nor leave at last undone what I came hither only to do."

CHAP. XXXII.

THEY ENTER THE PYRAMID.

PEKUAH descended to the tents, and the rest entered the Pyramid: they passed through the galleries, surveyed the vaults of marble, and examined the chest in which the body of the founder is supposed to have been repositied. They then sat down in one of the most spacious chambers to rest awhile before they attempted to return.

"We have now," said Imlac, "gratified our minds with an exact view of the greatest work of man, except the wall of China."

Of the wall it is very easy to assign the motive. It secured a wealthy and timorous nation from the incursions of barbarians, whose unskilfulness in arts made it easier for them to supply their wants by rapine than by industry, and who, from time to time, poured in upon the habitations of peaceful commerce, as vultures descend upon domestic fowl. Their celerity and fierceness, made the wall necessary, and their ignorance made it efficacious.

‘ But for the Pyramids no reason has ever been given adequate to the cost and labour of the work. The narrowness of the chambers proves that it could afford no retreat from enemies, and treasures might have been repositied at far less expense with equal security. It seems to have been erected only in compliance with that hunger of imagination which preys incessantly upon life, and must be always appeased by some employment. Those who have already all that they can enjoy must enlarge their desires. He that has built for use till use is supplied, must begin to build for vanity, and extend his plan to the utmost power of human performance, that he may not be soon reduced to form another wish.

“ I consider this mighty structure as a monument of the insufficiency of human enjoyments. A king, whose power is unlimited, and whose treasures surmount all real and imaginary wants, is compelled to solace, by the erection of a Pyramid, the satiety of dominion and tastelessness of pleasures, and to amuse the tediousness of declining life, by seeing thousands labouring without end, and one stone, for no purpose, laid upon another. Whoever thou art, that, not content with a moderate condition, imaginest happiness in royal magnificence, and drestest that command or riches can feed the appetite of novelty with perpetual gratifications, survey the Pyramids; and confess thy folly !”

CHAP. XXXIII.

THE PRINCESS MEETS WITH AN UNEXPECTED MISFORTUNE.

THEY rose up and returned through the cavity at which they had entered, and the princess prepared for her favourite a long narrative of dark labyrinths and costly rooms, and of the different impressions which the varieties of the way had made upon her. But when they came to their train, they found every one silent and dejected; the men discovered shame and fear in their countenances, and the women were weeping in the tents.

What had happened they did not try to conjecture, but immediately inquired. “ You had scarcely entered into the Pyramid,” said one of the attendants, “ when a troop of Arabs rushed upon us: we were too few to resist them, and too slow to escape. They were about to search the tents, set us on our camels, and drive us along before them, when the approach of some Turkish horsemen put them to flight; but they seized the Lady Pekuah with her two maids, and carried them away; the Turks are now pursuing them by our instigation, but I fear they will not be able to overtake them.”

The princess was overpowered with surprise and grief. Rasselas, in the first heat of his resentment, ordered his servants to follow him, and prepared to pursue the robbers with his sabre in his hand. “ Sir,” said Imlac, “ what can you hope from violence or valour? the Arabs are mounted on horses trained to battle and retreat; we have only beasts of burden. By leaving our present station we may lose the princess, but cannot hope to regain Pekuah.”

In a short time the Turks returned, having not been able to reach the enemy. The princess burst out into new lamentations, and Rasselas could scarcely forbear to reproach them with cowardice; but Imlac was of opinion, that the escape of the Arabs was no addition to their misfortune, for perhaps they would have killed their captives rather than have resigned them.

CHAP. XXXIV.

THEY RETURN TO CAIRO WITHOUT PEKUAH.

THERE was nothing to be hoped from longer stay. They returned to Cairo, repenting of their curiosity, censuring the negligence of the government, lamenting their own rashness, which had neglected to procure a guard, imagining many expedients by which the loss of Pekuah might have been prevented, and resolving to do something for her recovery, though none could find any thing proper to be done.

Nekayah retired to her chamber, where her women attempted to comfort her, by telling her that all had their troubles, and that Lady Pekuah had enjoyed much happiness in the world for a long time, and might reasonably expect a change of fortune. They hoped that some good would befall her wheresoever she was, and that their mistress would find another friend who might supply her place.

The princess made them no answer, and they continued the form of condolence, not much grieved in their hearts that the favourite was lost.

Next day the prince presented to the Bassa a memorial of the wrong which he had suffered, and a petition for redress. The Bassa threatened to punish the robbers, but did not attempt to catch them, nor indeed could any account or description be given by which he might direct the pursuit.

It soon appeared that nothing would be done by authority. Governors being accustomed to hear of more crimes than they can punish, and more wrongs than they can redress, set themselves at ease by indiscriminate negligence, and presently forget the request when they lose sight of the petitioner.

Imlac then endeavoured to gain some intelligence by private agents. He found many who pretended to an exact knowledge of all the haunts of the Arabs, and to regular correspondence with their chiefs, and who readily undertook the recovery of Pekuah. Of these, some were furnished with money for their journey, and came back no more; some were liberally paid for accounts which a few days discovered to be false. But the princess would not suffer any means, however improbable, to be left untried. While she was doing something, she kept her hope alive. As one expedient failed, another was suggested; when one messenger returned unsuccessful, another was despatched to a different quarter.

Two months had now passed, and of Pekuah nothing had been heard; the hopes which they had endeavoured to raise in each other grew more languid, and the princess, when she saw nothing more to be tried, sunk down inconsolable in hopeless dejection. A thousand times she reproached herself with the easy compliance by which she permitted her favourite to stay behind her. "Had not my fondness," said she, "lessened my authority, Pekuah had not dared to talk of her terrors. She ought to have feared me more than spectres. A severe look would have overpowered her; a peremptory command would have compelled obedience. Why did foolish indulgence prevail upon me? Why did I not speak, and refuse to hear?"

"Great princess," said Imlac, "do not reproach yourself for your virtue, or consider that as blameable by which evil has accidentally been caused. Your tenderness for the timidity of Pekuah was generous and kind. When we act according to our duty, we commit the event to Him by whose laws our actions are governed, and who will suffer none to be finally punished for obedience. When, in prospect of some good, whether natural or moral, we break the rules prescribed us, we withdraw from the direction of superior wisdom, and take all consequences upon ourselves. Man cannot so far know the connection of causes and events, as that he may venture to do wrong in order to do right. When we pursue our end by lawful means, we may always console our miscarriage by the hope of future recompense. When we consult only our own policy, and attempt to find a nearer way to good, by overleaping the settled boundaries of right and wrong, we cannot be happy even by success, because we cannot escape the consciousness of our fault; but, if we miscarry, the disappointment is irremediably embittered. How comfortless is the sorrow of him who feels at once the pangs of guilt, and the vexation of calamity which guilt has brought upon him!"

"Consider, princess, what would have been your condition, if the Lady Pekuah had entreated to accompany you, and being compelled to stay in the tents, had been carried away; or how would you have borne the thought, if you had forced her into the Pyramid, and she had died before you in agonies of terror?"

"Had either happened," said Nekayah, "I could not have endured life till now; I should have been tortured to madness by the remembrance of such cruelty, or must have pined away in abhorrence of myself."

"This at least," said Imlac, "is the present reward of virtuous conduct, that no unlucky consequence can oblige us to repent it."

CHAP. XXXV.

THE PRINCESS LANGUISHES FOR WANT OF PEKUAH.

NEKAYAH being thus reconciled to herself, found that no evil is insupportable but that which is accompanied with consciousness of wrong. She was from that time delivered from the violence of tempestuous sorrow, and sunk into silent pensiveness and gloomy tranquillity. She sat

from morning to evening recollecting all that had been done or said by her Pekuah, treasured up with care every trifle on which Pekuah had set an accidental value, and which might recall to mind any little incident or careless conversation. The sentiments of her, whom she now expected to see no more, were treasured in her memory as rules of life, and she deliberated to no other end than to conjecture on any occasion what would have been the opinion and counsel of Pekuah.

The women by whom she was attended knew nothing of her real condition, and therefore she could not talk to them but with caution and reserve. She began to remit her curiosity, having no great care to collect notions which she had no convenience of uttering. Rasselas endeavoured first to comfort, and afterwards to divert her; he hired musicians, to whom she seemed to listen, but did not hear them, and procured masters to instruct her in various arts, whose lectures, when they visited her again, were again to be repeated. She had lost her taste of pleasure, and her ambition of excellence. And her mind, though forced into short excursions, always recurred to the image of her friend.

Imlac was every morning earnestly enjoined to renew his inquiries, and was asked every night whether he had yet heard of Pekuah, till not being able to return the princess the answer that she desired, he was less and less willing to come into her presence. She observed his backwardness, and commanded him to attend her. "You are not," said she, "to confound impatience with resentment, or to suppose that I charge you with negligence, because I repine at your unsuccessfulness. I do not much wonder at your absence; I know that the unhappy are never pleasing, and that all naturally avoid the contagion of misery. To hear complaints is wearisome alike to the wretched and the happy; for who would cloud, by adventitious grief, the short gleams of gaiety which life allows us? or who, that is struggling under his own evils, will add to them the miseries of another?"

"The time is at hand, when none shall be disturbed any longer by the sighs of Nekayah: my search after happiness is now at an end. I am resolved to retire from the world with all its flatteries and deceits, and will hide myself in solitude, without any other care than to compose my thoughts, and regulate my hours by a constant succession of innocent occupations, till, with a mind purified from all earthly desires, I shall enter into that state to which all are hastening, and in which I hope again to enjoy the friendship of Pekuah."

"Do not entangle your mind," said Imlac, "by irrevocable determinations, nor increase the burden of life by a voluntary accumulation of misery: the weariness of retirement will continue or increase when the loss of Pekuah is forgotten. That you have been deprived of one pleasure is no very good reason for rejection of the rest."

"Since Pekuah was taken from me," said the princess, "I have no pleasure to reject or to retain. She that has no one to love or trust has little to hope. She wants the radical principle of happiness. We may, perhaps, allow, that what satisfaction this world can afford, must arise from the conjunction of wealth, knowledge, and goodness: wealth is

nothing but as it is bestowed; and knowledge nothing but as it is communicated: they must therefore be imparted to others, and to whom could I now delight to impart them? Goodness affords the only comfort which can be enjoyed without a partner, and goodness may be practised in retirement."

"How far solitude may admit goodness, or advance it, I shall not," replied Imlac, "dispute at present. Remember the confession of the pious hermit. You will wish to return into the world, when the image of your companion has left your thoughts."

"That time," said Nekayah, "will never come. The generous frankness, the modest obsequiousness, and the faithful secrecy of my dear Pekuah, will always be more missed as I shall live longer to see vice and folly."

"The state of a mind oppressed with a sudden calamity," said Imlac, "is like that of the fabulous inhabitants of the new-created earth, who, when the first night came upon them, supposed that day would never return. When the clouds of sorrow gather over us, we see nothing beyond them, nor can imagine how they will be dispelled; yet a new day succeeded to the night, and sorrow is never long without a dawn of ease. But they who restrain themselves from receiving comfort do as the savages would have done, had they put out their eyes when it was dark. Our minds, like our bodies, are in continual flux; something is hourly lost, and something acquired. To lose much at once is inconvenient to either, but while the vital powers remain uninjured, nature will find the means of reparation. Distance has the same effect on the mind as on the eye; and while we glide along the stream of time, whatever we leave behind us is always lessening, and that which we approach increasing in magnitude. Do not suffer life to stagnate; it will grow muddy for want of motion; commit yourself again to the current of the world; Pekuah will vanish by degrees; you will meet in your way some other favourite, or learn to diffuse yourself in general conversation."

"At least," said the prince, "do not despair before all remedies have been tried; the inquiry after the unfortunate lady is still continued, and shall be carried on with yet greater diligence, on condition that you will promise to wait a year for the event, without any unalterable resolution."

Nekayah thought this a reasonable demand, and made the promise to her brother, who had been advised by Imlac to require it. Imlac had, indeed, no great hope of regaining Pekuah, but he supposed, that if he could secure the interval of a year, the princess would be then in no danger of a cloister.

CHAP. XXXVI.

PEKUAH IS STILL REMEMBERED. THE PROGRESS OF SORROW.

NEKAYAH, seeing that nothing was omitted for the recovery of her favourite, and having, by her promise, set her intention of retirement at a distance, began imperceptibly to return to common cares and

common pleasures. She rejoiced without her own consent at the suspension of her sorrows, and sometimes caught herself with indignation in the act of turning away her mind from the remembrance of her, whom yet she resolved never to forget.

She then appointed a certain hour of the day for meditation on the merits and fondness of Pekuah, and for some weeks retired constantly at the time fixed, and returned with her eyes swollen and her countenance clouded. By degrees she grew less scrupulous, and suffered any important and pressing avocation to delay the tribute of daily tears. She then yielded to less occasions, sometimes forgot what she was indeed afraid to remember, and, at last, wholly released herself from the duty of periodical affliction."

Her real love of Pekuah was yet not diminished. A thousand occurrences brought her back to memory, and a thousand wants, which nothing but the confidence of friendship can supply, made her frequently regretted. She therefore solicited Imlac never to desist from inquiry, and to leave no art of intelligence untried, that at least she might have the comfort of knowing that she did not suffer by negligence or sluggishness. "Yet what," said she, "is to be expected from our pursuit of happiness, when we find the state of life to be such, that happiness itself is the cause of misery? Why should we endeavour to attain that of which the possession cannot be secured? I shall henceforward fear to yield my heart to excellence, however bright, or to fondness, however tender, lest I should lose again what I have lost in Pekuah."

CHAP. XXXVII.

THE PRINCESS HEARS NEWS OF PEKUAH.

IN seven months, one of the messengers, who had been sent away upon the day when the promise was drawn from the princess, returned, after many unsuccessful rambles, from the borders of Nubia, with an account that Pekuah was in the hand of an Arab chief, who possessed a castle or fortress on the extremity of Egypt. The Arab, whose revenue was plunder, was willing to restore her, with her two attendants, for two hundred ounces of gold.

The price was no subject of debate. The princess was in ecstasies when she heard that her favourite was alive, and might so cheaply be ransomed. She could not think of delaying for a moment Pekuah's happiness or her own, but entreated her brother to send back the messenger with the sum required. Imlac being consulted, was not very confident of the veracity of the relator, and was still more doubtful of the Arab's faith, who might, if he were too liberally trusted, detain at once the money and the captives. He thought it dangerous to put themselves in the power of the Arab by going into his district, and could not expect that the rover would so much expose himself as to come into the lower country, where he might be seized by the forces of the Bassa.

It is difficult to negotiate where neither will trust. But Imlac, after some deliberation, directed the messenger to propose that Pekuah should be conducted by ten horsemen to the monastery of St. Antony, which is situated in the deserts of Upper Egypt, where she should be met by the same number, and her ransom should be paid.

That no time might be lost, as they expected that the proposal would not be refused, they immediately began their journey to the monastery, and when they arrived, Imlac went forward with the former messenger to the Arab's fortress. Rasselas was desirous to go with them; but neither his sister nor Imlac would consent. The Arab, according to the custom of his nation, observed the laws of hospitality with great exactness to those who put themselves into his power, and, in a few days, brought Pekuah with her maids, by easy journeys, to the place appointed, where, receiving the stipulated price, he restored her with great respect to liberty and her friends, and undertook to conduct them back towards Cairo beyond all danger of robbery or violence.

The princess and her favourite embraced each other with transport too violent to be expressed, and went out together to pour the tears of tenderness in secret, and exchange professions of kindness and gratitude. After a few hours they returned into the refectory of the convent, where, in the presence of the prior and his brethren, the prince required of Pekuah the history of her adventures.

CHAP. XXXVIII.

THE ADVENTURES OF THE LADY PEKUAH.

"At what time, and in what manner I was forced away," said Pekuah, "your servants have told you. The suddenness of the event struck me with surprise, and I was at first rather stupified than agitated with any passion of either fear or sorrow. My confusion was increased by the speed and tumult of our flight while we were followed by the Turks, who, as it seemed, soon despaired to overtake us, or were afraid of those whom they made a show of menacing.

"When the Arabs saw themselves out of danger they slackened their course, and as I was less harassed by external violence, I began to feel more uneasiness in my mind. After some time we stopped near a spring shaded with trees in a pleasant meadow, where we were set upon the ground, and offered such refreshments as our masters were partaking. I was suffered to sit with my maids apart from the rest, and none attempted to comfort or insult us. Here I first began to feel the full weight of my misery. The girls sat weeping in silence, and from time to time looked on me for succour. I knew not to what condition we were doomed, nor could conjecture where would be the place of our captivity, or whence to draw any hope of deliverance. I was in the hands of robbers and savages, and had no reason to suppose that their pity was more than their justice, or that they would forbear the gratification of any ardour of desire or caprice of cruelty. I, however, kissed my maids, and endeavoured to pacify them by remarking, that we were yet treated with decency, and that, since we were now carried beyond pursuit, there was no danger of violence to our lives.

“ When we were to be set again on horseback, my maids clung round me, and refused to be parted, but I commanded them not to irritate those who had us in their power. We travelled the remaining part of the day through an unfrequented and pathless country, and came by moonlight to the side of a hill, where the rest of the troop was stationed. Their tents were pitched, and their fires kindled, and our chief was welcomed as a man much beloved by his dependents.

“ We were received into a large tent, where we found women who had attended their husbands in the expedition. They set before us the supper which they had provided, and I ate rather to encourage my maids, than to comply with any appetite of my own. When the meat was taken away, they spread the carpets for repose. I was weary, and hoped to find in sleep that remission of distress which nature seldom denies. Ordering myself therefore to be undressed, I observed that the women looked very earnestly upon me, not expecting, I suppose, to see me so submissively attended. When my upper vest was taken off, they were apparently struck with the splendour of my clothes, and one of them timorously laid her hand upon the embroidery. She then went out, and in a short time came back with another woman, who seemed to be of higher rank and greater authority. She did, at her entrance, the usual act of reverence, and taking me by the hand, placed me in a smaller tent, spread with finer carpets, where I spent the night quietly with my maids.

“ In the morning, as I was sitting on the grass, the chief of the troop came towards me. I rose up to receive him, and he bowed with great respect. ‘ Illustrious lady,’ said he, ‘ my fortune is better than I have presumed to hope: I am told by my women that I have a princess in my camp.’ ‘ Sir,’ answered I, ‘ your women have deceived themselves and you; I am not a princess, but an unhappy stranger, who intended soon to have left this country, in which I am now to be imprisoned for ever.’ ‘ Whoever or whencesoever you are,’ returned the Arab, ‘ your dress and that of your servants, show your rank to be high and your wealth to be great. Why should you, who can so easily procure your ransom, think yourself in danger of perpetual captivity? The purpose of my incursions is to increase my riches, or, more properly, to gather tribute. The sons of Ishmael are the natural and hereditary lords of this part of the continent, which is usurped by late invaders, and low-born tyrants, from whom we are compelled to take by the sword what is denied to justice. The violence of war admits no distinction; the lance that is lifted at guilt and power will sometimes fall on innocence and gentleness.’

“ ‘ How little,’ said I, ‘ did I expect that yesterday it should have fallen upon me!’

“ ‘ Misfortunes,’ answered the Arab, ‘ should always be expected. If the eye of hostility could learn reverence or pity, excellency like yours had been exempt from injury. But the angels of affliction spread their toils alike for the virtuous and the wicked, for the mighty and the mean. Do not be disconsolate: I am not one of the lawless

and cruel rovers of the desert; I know the rules of civil life; I will fix your ransom, give a passport to your messenger, and perform my stipulation with nice punctuality."

"You will easily believe that I was pleased with his courtesy: and finding that his predominant passion was desire of money, I began now to think my danger less, for I knew that no sum would be thought too great for the release of Pekuah. I told him, that he should have no reason to charge me with ingratitude, if I was used with kindness, and that any ransom which could be expected for a maid of common rank would be paid; but that he must not persist to rate me as a princess. He said he would consider what he should demand; and then smiling, bowed and retired.

"Soon after, the women came about me, each contending to be more officious than the other, and my maids themselves were served with reverence. We travelled onward by short journeys. On the fourth day the chief told me, that my ransom must be two hundred ounces of gold; which I not only promised him, but told him that I would add fifty more, if I and my maids were honorably treated.

"I never knew the power of gold before. From that time I was the leader of the troop. The march of every day was longer or shorter as I commanded, and the tents were pitched where I chose to rest. We now had camels and other conveniencies for travel, my own women were always at my side, and I amused myself with observing the manners of the vagrant nations, and with viewing remains of ancient edifices, with which these deserted countries appear to have been, in some distant age, lavishly embellished.

"The chief of the band was a man far from illiterate: he was able to travel by the stars or the compass, and had marked, in his erratic expeditions, such places as are most worthy the notice of a passenger. He observed to me, that buildings are always best preserved in places little frequented, and difficult of access: for, when once a country declines from its primitive splendour, the more inhabitants are left, the quicker ruin will be made. Walls supply stones more easily than quarries, and palaces and temples will be demolished, to make stables of granite and cottages of porphyry."

CHAP. XXXIX.

THE ADVENTURES OF PEKUAH CONTINUED.

"We wandered about in this manner for some weeks, whether, as our chief pretended, for my gratification, or as I rather suspected, for some convenience of his own. I endeavoured to appear contented, where sullenness and resentment would have been of no use, and that endeavour conduced much to the calmness of my mind; but my heart was always with Nekayah, and the troubles of the night much overbalanced the amusements of the day. My women, who threw all their cares upon their mistress, set their minds at ease from the time when they saw me treated with respect, and gave themselves up to the incidental alleviations of our fatigue without solicitude or sorrow. I was

pleased with their pleasure, and animated with their confidence. My condition had lost much of its terror, since I found that the Arab ranged the country merely to get riches. Avarice is an uniform and tractable vice : other intellectual distempers are different in different constitutions of mind ; that which soothes the pride of one will offend the pride of another ; but to the favour of the covetous there is a ready way : bring money, and nothing is denied.

“ At last we came to the dwelling of our chief, a strong and spacious house, built with stone, in an island of the Nile, which lies, as I was told, under the tropic. ‘ Lady,’ said the Arab, ‘ you shall rest after your journey a few weeks in this place, where you are to consider yourself as sovereign. My occupation is war : I have therefore chosen this obscure residence, from which I can issue unexpected, and to which I can retire unpursued. You may now repose in security : here are few pleasures, but here is no danger.’ He then led me into the inner apartments, and seating me on the richest couch, bowed to the ground. His women, who considered me as a rival, looked on me with malignity : but being soon informed that I was a great lady, detained only for my ransom, they began to vie with each other in obsequiousness and reverence.

“ Being again comforted with new assurances of speedy liberty, I was for some days diverted from impatience by the novelty of the place. The turrets overlooked the country to a great distance, and afforded a view of many windings of the stream. In the day I wandered from one place to another, as the course of the sun varied the splendour of the prospect, and saw many things which I had never seen before. The crocodiles and river horses are common in this unpeopled region, and I often looked upon them with terror, though I knew they could not hurt me. For some time I expected to see mermaids and tritons, which, as Imlac has told me, the European travellers have stationed in the Nile : but no such beings ever appeared, and the Arab, when I inquired after them, laughed at my credulity.

“ At night the Arab always attended me to a tower set apart for celestial observations, where he endeavoured to teach me the names and courses of the stars. I had no great inclination to this study, but an appearance of attention was necessary to please my instructor, who valued himself for his skill ; and, in a little while, I found some employment requisite to beguile the tediousness of time, which was to be passed always amidst the same objects. I was weary of looking in the morning on things from which I had turned away weary in the evening : I therefore was at last willing to observe the stars rather than do nothing, but could not always compose my thoughts, and was very often thinking on Nekayah when others imagined me contemplating the sky. Soon after, the Arab went upon another expedition, and then my only pleasure was to talk with my maids about the accident by which we were carried away, and the happiness that we should all enjoy at the end of our captivity.”

“ There were women in your Arab’s fortress,” said the princess, “ why did you not make them companions, enjoy their conversation,

and partake their diversions? In a place where they found business or amusement, why should you alone sit corroded with idle melancholy? or why could not you bear, for a few months, that condition to which they were condemned for life?"

"The diversions of the women," answered Pekuah, "were only childish play, by which the mind, accustomed to stronger operations, could not be kept busy. I could do all which they delighted in doing by powers merely sensitive, while my intellectual faculties were flown to Cairo. They ran from room to room, as a bird hops from wire to wire in his cage. They danced for the sake of motion, as lambs frisk in a meadow. One sometimes pretended to be hurt, that the rest might be alarmed; or hid herself, that another might seek her. Part of their time passed in watching the progress of light bodies that floated on the river, and part in marking the various forms into which clouds broke in the sky.

"Their business was only needlework, in which I and my maids sometimes helped them; but you know that the mind will easily straggle from the fingers, nor will you suspect that captivity and absence from Nekayah could receive solace from silken flowers.

"Nor was much satisfaction to be hoped from their conversation: for of what could they be expected to talk? They had seen nothing; for they had lived from early youth in that narrow spot; of what they had not seen they could have no knowledge, for they could not read. They had no ideas but of the few things that were within their view, and had hardly names for any thing but their clothes and their food. As I bore a superior character, I was often called to terminate their quarrels, which I decided as equitably as I could. If it could have amused me to hear the complaints of each against the rest, I might have been often detained by long stories; but the motives of their animosity were so small that I could not listen without interrupting the tale."

"How," said Rasselas, "can the Arab, whom you represented as a man of more than common accomplishments, take any pleasure in his seraglio when it is filled only with women like these? Are they exquisitely beautiful?"

"They do not," said Pekuah "want that unaffected and ignoble beauty which may subsist without sprightliness or sublimity, without energy of thought or dignity of virtue. But to a man like the Arab such beauty was only a flower casually plucked and carelessly thrown away. Whatever pleasures he might find among them, they were not those of friendship or society. When they were playing about him he looked on them with inattentive superiority; when they vied for his regard he sometimes turned away disgusted. As they had no knowledge, their talk could take nothing from the tediousness of life: as they had no choice, their fondness, or appearance of fondness, excited in him neither pride nor gratitude; he was not exalted in his own esteem by the smiles of a woman who saw no other man, nor was much obliged by that regard, of which he could never know the sincerity; and which he might often perceive to be exerted, not so much to delight him as to pain a rival. That which he gave, and they received, as love, was only

a careless distribution of superfluous time, such love as man can bestow upon that which he despises, such as has neither hope nor fear, neither joy nor sorrow."

"Ye have reason, lady, to think yourself happy," said Imlac, "that you have been thus easily dismissed. How could a mind, hungry for knowledge, be willing, in an intellectual famine, to lose such a banquet as Pekuah's conversation?"

"I am inclined to believe," answered Pekuah, "that he was for some time in suspense: for, notwithstanding his promise, whenever I proposed to despatch a messenger to Cairo, he found some excuse for delay. While I was detained in his house he made many incursions into the neighbouring countries, and perhaps he would have refused to discharge me, had his plunder been equal to his wishes. He returned always courteous, related his adventures, delighted to hear my observations, and endeavoured to advance my acquaintance with the stars. When I importuned him to send away my letters, he soothed me with professions of honour and sincerity; and, when I could be no longer decently denied, put his troop again in motion, and left me to govern in his absence. I was much afflicted by this studied procrastination, and was sometimes afraid that I should be forgotten; that you would leave Cairo, and I must end my days in an island of the Nile.

"I grew at last hopeless and dejected, and cared so little to entertain him, that he for a while more frequently talked with my maids. That he should fall in love with them or with me might have been equally fatal, and I was not much pleased with the growing friendship. My anxiety was not long; for, as I recovered some degree of cheerfulness, he returned to me, and I could not forbear to despise my former uneasiness.

"He still delayed to send for my ransom, and would, perhaps, never have determined, had not your agent found his way to him. The gold, which he would not fetch, he could not reject when it was offered. He hastened to prepare for our journey hither, like a man delivered from an intestine conflict. I took leave of my companions in the house, who dismissed me with cold indifference."

Nekayah having heard her favourite's relation, rose and embraced her, and Rasselas gave her a hundred ounces of gold, which she presented to the Arab for the fifty that were promised.

CHAP. XL.

THE HISTORY OF A MAN OF LEARNING.

THEY returned to Cairo, and were so well pleased at finding themselves together, that none of them went much abroad. The prince began to love learning, and one day declared to Imlac, that he intended to devote himself to science, and pass the rest of his days in literary solitude.

"Before you make your final choice," answered Imlac, "you ought to examine its hazards, and converse with those who are grown old in the company of themselves. I have just left the observatory of

one of the most learned astronomers in the world, who has spent forty years in unwearied attention to the motions and appearances of the celestial bodies, and has drawn out his soul in endless calculations. He admits a few friends once a month to hear his deductions and enjoy his discoveries. I was introduced as a man of knowledge worthy of his notice. Men of various ideas and fluent conversation are commonly welcome to those whose thoughts have been long fixed upon a single point, and who find the images of other things stealing away. I delighted him with my remarks; he smiled at the narrative of my travels; and was glad to forget the constellations, and descend for a moment into the lower world.

"On the next day of vacation I renewed my visit, and was so fortunate as to please him again. He relaxed from that time the severity of this rule, and permitted me to enter at my own choice. I found him always busy, and always glad to be relieved. As each knew much which the other was desirous of learning, we exchanged our notions with great delight. I perceived that I had every day more of his confidence, and always found new cause of admiration in the profundity of his mind. His comprehension is vast, his memory capacious and retentive, his discourse is methodical, and his expression clear.

"His integrity and benevolence are equal to his learning. His deepest researches and most favourite studies are willingly interrupted for any opportunity of doing good by his counsel or his riches. To his closest retreat, at his most busy moments, all are admitted that want his assistance: 'For though I exclude idleness and pleasure, I will never,' says he, 'bar my doors against charity. To man is permitted the contemplation of the skies, but the practice of virtue is commanded.'"

"Surely," said the princess, "this man is happy."

"I visited him," said Imlac, "with more and more frequency, and was every time more enamoured of his conversation: He was sublime without haughtiness, courteous without formality, and communicative without ostentation. I was at first, great princess, of your opinion, thought him the happiest of mankind, and often congratulated him on the blessing that he enjoyed. He seemed to hear nothing with indifference but the praises of his condition, to which he always returned a general answer, and diverted the conversation to some other topic.

"Amidst this willingness to be pleased and labour to please, I had quickly reason to imagine that some painful sentiment passed upon his mind. He often looked up earnestly towards the sun, and let his voice fall in the midst of his discourse. He would, sometimes, when we were alone, gaze upon me in silence with the air of a man who longed to speak what he was yet resolved to suppress. He would often send for me with vehement injunctions of haste, though, when I came to him, he had nothing extraordinary to say. And sometimes, when I was leaving him, would call me back, pause a few moments, and then dismiss me."

CHAP. XLI.

THE ASTRONOMER DISCOVERS THE CAUSE OF HIS UNEASINESS.

"AT last the time came when the secret burst his reserve. We were sitting together last night in the turret of his house, watching the emersion of a satellite of Jupiter. A sudden tempest clouded the sky, and disappointed our observation. We sat awhile silent in the dark, and then he addressed himself to me in these words: 'Imlac, I have long considered thy friendship as the greatest blessing of my life. Integrity without knowledge is weak and useless, and knowledge without integrity is dangerous and dreadful. I have found in thee all the qualities requisite for trust, benevolence, experience, and fortitude. I have long discharged an office which I must soon quit at the call of nature, and shall rejoice in the hour of imbecility and pain to devolve it upon thee.'

"I thought myself honoured by this testimony, and protested, that whatever could conduce to his happiness would add likewise to mine.

"Hear, Imlac, what thou wilt not without difficulty credit. I have possessed for five years the regulation of the weather, and the distribution of the seasons; the sun has listened to my dictates, and passed from tropic to tropic by my direction; the clouds, at my call have poured their waters, and the Nile has overflowed at my command; I have restrained the rage of the dog-star, and mitigated the fervors of the crab. The winds alone, of all the elemental powers, have hitherto refused my authority, and multitudes have perished by equinoctial tempests, which I found myself unable to prohibit or restrain. I have administered this great office with exact justice, and made to the different nations of the earth an impartial dividend of rain and sunshine. What must have been the misery of half the globe, if I had limited the clouds to particular regions, or confined the sun to either side of the equator?"

CHAP. XLII.

THE OPINION OF THE ASTRONOMER IS EXPLAINED AND JUSTIFIED

"I SUPPOSE he discovered in me, through the obscurity of the room, some tokens of amazement and doubt, for, after a short pause, he proceeded thus:—

"Not to be easily credited will neither surprise nor offend me; for I am, probably, the first of human beings to whom this trust has been imparted. Nor do I know whether to deem this distinction a reward or punishment; since I have possessed it I have been far less happy than before, and nothing but the consciousness of good intention could have enabled me to support the weariness of unremitted vigilance.'

"How long, Sir,' said I, 'has this great office been in your hands?'

“‘About ten years ago,’ said he, ‘my daily observations of the changes of the sky led me to consider, whether, if I had the power of the seasons, I could confer greater plenty upon the inhabitants of the earth. This contemplation fastened on my mind, and I sat days and nights in imaginary dominion, pouring upon this country and that the showers of fertility, and seconding every fall of rain with a due proportion of sunshine. I had yet only the will to do good, and did not imagine that I should ever have the power.’

“‘One day, as I was looking on the fields withering with heat, I felt in my mind a sudden wish that I could send rain on the southern mountains, and raise the Nile to an inundation. In the hurry of my imagination I commanded rain to fall, and by comparing the time of my command with that of the inundation, I found that the clouds had listened to my lips.’

“‘Might not some other cause,’ said I, ‘produce this concurrence? the Nile does not always rise on the same day.’

“‘Do not believe,’ said he, with impatience, ‘that such objections could escape me: I reasoned long against my own conviction, and laboured against truth with the utmost obstinacy. I sometimes suspected myself of madness, and should not have dared to impart this secret but to a man like you, capable of distinguishing the wonderful from the impossible, and the incredible from the false.’

“‘Why, Sir,’ said I, ‘do you call that incredible, which you know, or think you know, to be true?’

“‘Because,’ said he, ‘I cannot prove it by any external evidence; and I know too well the laws of demonstration to think that my conviction ought to influence another, who cannot, like me, be conscious of its force. I therefore shall not attempt to gain credit by disputation. It is sufficient that I feel this power, that I have long possessed, and every day exerted it. But the life of man is short, the infirmities of age increase upon me, and the time will soon come, when the regulator of the year must mingle with the dust. The care of appointing a successor has long disturbed me; the night and the day have been spent in comparisons of all the characters which have come to my knowledge, and I have yet found none so worthy as thyself.’”

CHAP XLIII.

THE ASTRONOMER LEAVES IMLAC HIS DIRECTIONS.

“‘HEAR, therefore, what I shall impart with attention, such as the welfare of a world requires. If the task of a king be considered as difficult, who has the care only of a few millions, to whom he cannot do much good or harm, what must be the anxiety of him, on whom depends the action of the elements, and the great gifts of light and heat!—Hear me, therefore, with attention.’

“‘I have diligently considered the position of the earth and sun, and formed innumerable schemes in which I changed their situation.

I have sometimes turned aside the axis of the earth, and sometimes varied the ecliptic of the sun : but I have found it impossible to make a disposition by which the world may be advantaged ; what one region gains, another loses by any imaginable alteration, even without considering the distant parts of the solar system with which we are unacquainted. Do not, therefore, in thy administration of the year, indulge thy pride by innovation ; do not please thyself with thinking that thou canst make thyself renowned to all future ages by disordering the seasons. The memory of mischief is no desirable fame. Much less will it become thee to let kindness or interest prevail. Never rob other countries of rain to pour it on thine own. For us the Nile is sufficient.'

"I promised, that when I possessed the power, I would use it with inflexible integrity ; and he dismissed me, pressing my hand. 'My heart, said he, 'will be now at rest, and my benevolence will no more destroy my quiet ; I have found a man of wisdom and virtue, to whom I can cheerfully bequeath the inheritance of the sun.'"

The prince heard this narration with very serious regard ; but the princess smiled, and Pekuah convulsed herself with laughter. "Ladies," said Imlac, "to mock the heaviest of human afflictions is neither charitable nor wise. Few can attain this man's knowledge, and few practise his virtues ; but all may suffer his calamity. Of the uncertainties of our present state, the most dreadful and alarming is the uncertain continuance of reason."

The princess was recollected, and the favourite was abashed. Rasselas, more deeply affected, inquired of Imlac, whether he thought such maladies of the mind frequent, and how they were contracted ?

CHAP. XLIV.

THE DANGEROUS PREVALENCE OF IMAGINATION.

"DISORDERS of intellect," answered Imlac, "happen much more often than superficial observers will easily believe. Perhaps, if we speak with rigorous exactness, no human mind is in its right state. There is no man whose imagination does not sometimes predominate over his reason, who can regulate his attention wholly by his will, and whose ideas will come and go at his command. No man will be found in whose mind airy notions do not sometimes tyrannise, and force him to hope or fear beyond the limits of sober probability. All power of fancy over reason is a degree of insanity ; but while this power is such as we can control and repress, is it not visible to others, nor considered as any depravation of the mental faculties : it is not pronounced madness, but when it becomes ungovernable, and apparently influences speech or action.

"To indulge the power of fiction, and send imagination out upon the wing, is often the sport of those who delight too much in silent speculation. When we are alone we are not always busy ; the labour of excogitation is too violent to last long ; the ardour of inquiry will

sometimes give way to idleness or satiety. He who has nothing external that can divert him, must find pleasure in his own thoughts, and must conceive himself what he is not; for who is pleased with what he is? He then expatiates in boundless futurity, and culls from all imaginable conditions that which for the present moment he should most desire, amuses his desires with impossible enjoyments, and confers upon his pride unattainable dominion. The mind dances from scene to scene, unites all pleasures in all combinations, and riots in delights, which nature and fortune, with all their bounty, cannot bestow.

"In time, some particular train of ideas fixes the attention; all other intellectual gratifications are rejected; the mind, in weariness or leisure, recurs constantly to the favourite conception, and feasts on the luscious falsehood, whenever, she is offended with the bitterness of truth. By degrees the reign of fancy is confirmed; she grows first imperious, and in time despotic. Then fictions begin to operate as realities, false opinions fasten upon the mind, and life passes in dreams of rapture or of anguish.

"This, Sir, is one of the dangers of solitude, which the hermit has confessed not always to promote goodness, and the astronomer's misery has proved to be not always propitious to wisdom."

"I will no more," said the favourite, "imagine myself the queen of Abyssinia. I have often spent the hours, which the princess gave to my own disposal, in adjusting ceremonies and regulating the court; I have repressed the pride of the powerful, and granted the petitions of the poor; I have built new palaces in more happy situations, planted groves upon the tops of the mountains, and have exulted in the beneficence of royalty, till, when the princess entered, I had almost forgotten to bow down before her."

"And I," said the princess, "will not allow myself any more to play the shepherdess in my waking dreams. I have often soothed my thoughts with the quiet and innocence of pastoral employments, till I have, in my chamber, heard the winds whistle, and the sheep bleat: sometimes freed the lamb entangled in the thicket, and sometimes with my crook encountered the wolf. I have a dress like that of the village maids, which I put on to help my imagination, and a pipe on which I play softly, and suppose myself followed by my flocks."

"I will confess," said the prince, "an indulgence of fantastic delight more dangerous than yours. I have frequently endeavoured to imagine the possibility of a perfect government, by which all wrong should be restrained, all vice reformed, and all the subjects preserved in tranquillity and innocence. This thought produced innumerable schemes of reformation, and dictated many useful regulations and salutary edicts. This has been the sport, and sometimes the labour of my solitude; and I start, when I think with how little anguish I once supposed the death of my father and my brothers."

"Such," says Imlac, "are the effects of visionary schemes: when we first form them we know them to be absurd, but familiarise them by degrees, and in time lose sight of their folly."

CHAP. XLV.

THEY DISCOURSE WITH AN OLD MAN.

THE evening was now far past, and they rose to return home. As they walked along the bank of the Nile, delighted with the beams of the moon quivering on the water, they saw at a small distance an old man, whom the prince had often heard in the assembly of the sages.

"Yonder," said he, "is one whose years have calmed his passions, but not clouded his reason: let us close the disquisitions of the night, by inquiring what are his sentiments of his own state, that we may know whether youth alone is to struggle with vexation, and whether any better hope remains for the latter part of life."

Here the sage approached and saluted them. They invited him to join their walk, and prattled awhile, as acquaintance that had unexpectedly met one another. The old man was cheerful and talkative, and the way seemed short in his company. He was pleased to find himself not disregarded, accompanied them to their house, and, at the prince's request, entered with them. They placed him in the seat of honour, and set wine and conserves before him.

"Sir," said the princess, "an evening walk must give to a man of learning, like you, pleasures which ignorance and youth can hardly conceive. You know the qualities and causes of all that you behold, the laws by which the river flows, the periods in which the planets perform their revolutions. Every thing must supply you with contemplation, and renew the consciousness of your own dignity."

"Lady," answered he, "let the gay and the vigorous expect pleasure in their excursions; it is enough that age can obtain ease. To me the world has lost its novelty; I look round, and see what I remember to have seen in happier days. I rest against a tree, and consider, that in the same shade I once disputed upon the annual overflow of the Nile with a friend who is now silent in the grave. I cast my eyes upwards, fix them on the changing moon, and think with pain on the vicissitudes of life. I have ceased to take much delight in physical truth; for what have I to do with those things which I am soon to leave?"

"You may at least recreate yourself," said Imlac, "with recollection of an honourable and useful life, and enjoy the praise which all agree to give you."

"Praise," said the sage, with a sigh, "is to an old man an empty sound. I have neither mother to be delighted with the reputation of her son, nor wife to partake the honours of her husband. I have outlived my friends and my rivals. Nothing is now of much importance, for I cannot extend my interest beyond myself. Youth is delighted with applause, because it is considered as the earnest of some future good, and because the prospect of life is far extended: but to me, who am now declining to decrepitude, there is little to be feared from the malevolence of men, and yet less to be hoped from their affection or esteem. Something they may yet take away, but they can give me nothing. Riches would now be useless, and high employment would

be pain. My retrospect of life recalls to my view many opportunities of good neglected, much time squandered upon trifles, and more lost in idleness and vacancy. I leave many great designs unattempted, and many great attempts unfinished. My mind is burdened with no heavy crime, and therefore I compose myself to tranquillity; endeavour to abstract my thoughts from hopes and cares, which, though reason knows them to be vain, still try to keep their old possession of the heart; expect, with serene humility, that hour which nature cannot long delay; and hope to possess, in a better state, that happiness which here I could not find, and that virtue which here I have not attained."

He rose and went away, leaving his audience not much elated with the hope of long life. The prince consoled himself with remarking, that it was not reasonable to be disappointed by this account; for age had never been considered as the season of felicity; and if it was possible to be easy in decline and weakness, it was likely that the days of vigour and alacrity might be happy: that the noon of life might be bright, if the evening could be calm.

The princess suspected that age was querulous and malignant, and delighted to repress the expectations of those who had newly entered the world. She had seen the possessors of estates look with envy on their heirs, and known many who enjoyed pleasure no longer than they can confine it to themselves.

Pekuah conjectured that the man was older than he appeared, and was willing to impute his complaints to delirious dejection; or else supposed that he had been unfortunate, and was therefore discontented: "For nothing," said she, "is more common, than to call our own condition the condition of life."

Imlac, who had no desire to see them depressed, smiled at the comforts which they could so readily procure to themselves, and remembered; that at the same age, he was equally confident of unmingled prosperity, and equally fertile of consolatory expedients. He forbore to force upon them unwelcome knowledge, which time itself would too soon impress. The princess and her lady retired; the madness of the astronomer hung in their minds, and they desired Imlac to enter upon his office, and delay next morning the rising of the sun.

CHAP. XLVI.

THE PRINCESS AND PEKUAH VISIT THE ASTRONOMER.

THE princess and Pekuah having talked in private of Imlac's astronomer, thought his character at once so amiable and so strange, that they could not be satisfied without a nearer knowledge; and Imlac was requested to find the means of bringing them together.

This was somewhat difficult; the philosopher had never received any visits from women, though he lived in a city that had in it many Europeans, who followed the manners of their own countries, and many from other parts of the world, that lived there with European liberty. The ladies would not be refused, and several schemes were

proposed for the accomplishment of their design. It was proposed to introduce them as strangers in distress, to whom the sage was always accessible: but, after some deliberation, it appeared, that, by this artifice, no acquaintance could be formed, for their conversation would be short, and they could not decently importune him often. "This," said Rasselas, "is true; but I have yet a stronger objection against the misrepresentation of your state. I have always considered it as treason against the great republic of human nature, to make any man's virtues the means of deceiving him, whether on great or little occasions. All imposture weakens confidence and chills benevolence. When the sage finds that you are not what you seemed, he will feel the resentment natural to a man who, conscious of great abilities, discovers that he has been tricked by understandings meaner than his own; and, perhaps, the distrust which he can never afterwards wholly lay aside, may stop the voice of counsel, and close the hand of charity; and where will you find the power of restoring his benefactions to mankind, or his peace to himself?"

To this no reply was attempted, and Imlac began to hope that their curiosity would subside; but, next day, Pekuah told him, she had now found an honest pretence for a visit to the astronomer, for she would solicit permission to continue under him the studies in which she had been initiated by the Arab, and the princess might go with her either as a fellow-student, or because a woman could not decently come alone. "I am afraid," said Imlac, "that he will be soon weary of your company: men advanced far in knowledge do not love to repeat the elements of their art, and I am not certain that even of the elements, as he will deliver them connected with inferences, and mingled with reflections, you are a very capable auditress." "That," said Pekuah, "must be my care; I ask of you only to take me thither. My knowledge is, perhaps, more than you imagine it, and, by concurring always with his opinions, I shall make him think it greater than it is."

The astronomer, in pursuance of this resolution, was told, that a foreign lady, travelling in search of knowledge, had heard of his reputation, and was desirous to become his scholar. The uncommonness of the proposal raised at once his surprise and curiosity; and when, after a short deliberation, he consented to admit her, he could not stay without impatience till the next day.

The ladies dressed themselves magnificently, and were attended by Imlac to the astronomer, who was pleased to see himself approached with respect by persons of so splendid an appearance. In the exchange of the first civilities he was timorous and bashful; but when the talk became regular, he recollected his powers, and justified the character which Imlac had given. Inquiring of Pekuah, what could have turned her inclination towards astronomy, he received from her a history of her adventure at the Pyramid, and of the time passed at the Arab's Island. She told her tale with ease and elegance, and her conversation took possession of his heart. The discourse was then turned to astronomy: Pekuah displayed what she knew; he looked upon her as a prodigy of genius, and entreated her not to desist from a study which she had so happily begun.

They came again and again, and were every time more welcome than before. The sage endeavoured to amuse them, that they might prolong their visits, for he found his thoughts grow brighter in their company; the clouds of solicitude vanished by degrees, as he forced himself to entertain them, and he grieved when he was left at their departure to his old employment of regulating the seasons.

The princess and her favourite had now watched his lips for several months, and could not catch a word from which they could judge whether he continued, or not, in the opinion of his preternatural commission. They often contrived to bring him to an open declaration; but he easily eluded all their attacks, and on which side soever they pressed him, escaped from them to some other topic.

As their familiarity increased, they invited him often to the house of Imlac, where they distinguished him by extraordinary respect. He began gradually to delight in sublunary pleasures. He came early and departed late; laboured to recommend himself by assiduity and compliance; excited their curiosity after new arts, that they might still want his assistance; and when they made any excursion of pleasure or inquiry entreated to attend them.

By long experience of his integrity and wisdom, the prince and his sister were convinced that he might be trusted without danger; and, lest he should draw any false hopes from the civilities which he received, discovered to him their condition, with the motives of their journey; and required his opinion on the choice of life.

"Of the various conditions which the world spreads before you, which you shall prefer," said the sage, "I am not able to instruct you. I can only tell that I have chosen wrong. I have passed my time in study without experience; in the attainment of sciences, which can, for the most part, be but remotely useful to mankind. I have purchased knowledge at the expense of all the common comforts of life: I have missed the endearing elegance of female friendship, and the happy commerce of domestic tenderness. If I have obtained any prerogatives above other students, they have been accompanied with fear, disquiet, and scrupulosity; but even of these prerogatives, whatever they were, I have, since my thoughts have been diversified by more intercourse with the world, begun to question the reality. When I have been for a few days lost in pleasing dissipation, I am always tempted to think that my inquiries have ended in error, and that I have suffered much and suffered it in vain."

Imlac was delighted to find that the sage's understanding was breaking through its mists, and resolved to detain him from the planets till he should forget his task of ruling them, and reason should recover its original influence.

From this time the astronomer was received into familiar friendship, and partook of all their projects and pleasures: his respect kept him attentive, and the activity of Rasselas did not leave much time unengaged. Something was always to be done; the day was spent in making observations which furnished talk for the evening, and the evening was closed with a scheme for the morrow.

The sage confessed to Imlac, that since he had mingled in the gay tumults of life, and divided his hours by a succession of amusements, he found the conviction of his authority over the skies fade gradually from his mind, and began to trust less to an opinion which he never could prove to others, and which he now found subject to variation, from causes in which reason had no part. "If I am accidentally left alone for a few hours," said he, "my inveterate persuasion rushes upon my soul, and my thoughts are chained down by some irresistible violence; but they are soon disentangled by the prince's conversation; and instantaneously released at the entrance of Pekuah. I am like a man habitually afraid of spectres, who is set at ease by a lamp, and wonders at the dread which harassed him in the dark; yet, if his lamp be extinguished, feels again the terrors which he knows that when it is light he shall feel no more. But I am sometimes afraid lest I indulge my quiet by criminal negligence, and voluntarily forget the great charge with which I am entrusted. If I favour myself in a known error, or am determined by mine own ease in a doubtful question of this importance, how dreadful is my crime!"

"No disease of the imagination," answered Imlac, "is so difficult of cure as that which is complicated with the dread of guilt; fancy and conscience then act interchangeably upon us; and so often shift their places, that the illusions of one are not distinguished from the dictates of the other. If fancy presents images not moral or religious, the mind drives them away when they give it pain; but when melancholic notions take the form of duty, they lay hold on the faculties without opposition, because we are afraid to exclude or banish them. For this reason the superstitious are often melancholy, and the melancholy almost always superstitious.

"But do not let the suggestions of timidity overpower your better reason: the danger of neglect can be but as the probability of the obligation which, when you consider it with freedom, you find very little, and that little growing every day less. Open your heart to the influence of the light, which, from time to time breaks in upon you: when scruples importune you, which you in your lucid moments know to be vain, do not stand to parley, but fly to business or to Pekuah, and keep this thought always prevalent, that you are only one atom of the mass of humanity, and have neither such virtue nor vice, as that you should be singled out for supernatural favours or afflictions."

CHAP. XLVII.

THE PRINCE ENTERS, AND BRINGS A NEW TOPIC.

"ALL this," said the astronomer, "I have often thought, but my reason has been so long subjugated by an uncontrollable and overwhelming idea, that it durst not confide in its own decisions. I now see how fatally I betrayed my quiet, by suffering chimeras to prey upon me in secret; but melancholy shrinks from communication, and I never found a man before to whom I could impart my troubles, though I had been certain of relief. I rejoice to find my own sentiments confirmed by yours, who are not easily deceived, and can have no

motive or purpose to deceive. I hope that time and variety will dissipate the gloom that has so long surrounded me, and the latter part of my days will be spent in peace."

"Your learning and virtue," said Imlac, "may justly give you hopes."

Rasselas then entered with the princess and Pekuah, and inquired, whether they had contrived any new diversions for the next day? "Such," said Nekayah, "is the state of life that none are happy but by the anticipation of change: the change itself is nothing; when we have made it, the next wish is to change again. The world is not yet exhausted; let me see something to-morrow which I never saw before."

"Variety," said Rasselas, "is so necessary to content, that even the Happy Valley disgusted me by the recurrence of its luxuries; yet I could not forbear to reproach myself with impatience, when I saw the monks of St. Anthony support without complaint, a life, not of uniform delight, but uniform hardship."

"Those men," answered Imlac, "are less wretched in their silent convent than the Abyssinian princes in their prison of pleasure. Whatever is done by the monks is incited by an adequate and reasonable motive. Their labour supplies them with necessaries; it therefore cannot be omitted, and is certainly rewarded. Their devotion prepares them for another state, and reminds them of its approach while it fits them for it. Their time is regularly distributed; one duty succeeds another, so that they are not left open to the distraction of unguided choice, nor lost in the shades of listless inactivity. There is a certain task to be performed at an appropriated hour; and their toils are cheerful, because they consider them as acts of piety, by which they are always advancing towards endless felicity."

"Do you think," said Nekayah, "that the monastic rule is a more holy and less imperfect state than any other? May not he equally hope for future happiness who converses openly with mankind, who succours the distressed by his charity, instructs the ignorant by his learning, and contributes by his industry to the general system of life; even though he should omit some of the mortifications which are practised in the cloister, and allow himself such harmless delights as his condition may place within his reach?"

"This," said Imlac, "is a question which has long divided the wise, and perplexed the good. I am afraid to decide on either part. He that lives well in the world is better than he that lives well in a monastery. But, perhaps, every one is not able to stem the temptations of public life: and if he cannot conquer, he may properly retreat. Some have little power to do good, and have likewise little strength to resist evil. Many are weary of their conflicts with adversity, and are willing to eject those passions which have long busied them in vain. And many are dismissed by age and diseases from the more laborious duties of society. In monasteries the weak and timorous may be happily sheltered, the weary may repose, and the penitent may meditate. Those retreats of prayer and contemplation have something so congenial to the mind of man, that, perhaps, there is scarcely

one that does not purpose to close his life in pious abstraction with a few associates serious as himself."

"Such," said Pekuah, "has often been my wish, and I have heard the princess declare, that she could not willingly die in a crowd."

"The liberty of using harmless pleasures," proceeded Imlac, "will not be disputed: but it is still to be examined what pleasures are harmless. The evil of any pleasure that Nekayah can image, is not in the act itself, but in its consequences. Pleasure, in itself harmless, may become mischievous, by endearing to us a state which we know to be transient and probatory, and withdrawing our thoughts from that of which every hour brings us nearer to the beginning, and of which no length of time will bring us to the end. Mortification is not virtuous in itself, nor has any other use, but that it disengages us from the allurements of sense. In the state of future perfection, to which we all aspire, there will be pleasure without danger, and security without restraint."

The princess was silent, and Rasselas, turning to the astronomer, asked him, whether he could not delay her retreat, by showing her something which she had not seen before?

"Your curiosity," said the sage, "has been general, and your pursuit of knowledge so vigorous, that novelties are not now very easily to be found: but what you can no longer procure from the living may be given by the dead. Among the wonders of this country are the Catacombs, or the ancient repositories, in which the bodies of the earliest generations were lodged, and where, by the virtue of the gums which embalmed them, they yet remain without corruption."

"I know not," said Rasselas, "what pleasure the sight of the Catacombs can afford; but, since nothing else offered, I am resolved to view them, and shall place this with many other things which I have done, because I would do something."

They hired a guard of horsemen, and the next day visited the Catacombs. When they were about to descend into the sepulchral caves, "Pekuah," said the princess, "we are now again invading the habitations of the dead; I know that you will stay behind; let me find you safe when I return." "No, I will not be left," answered Pekuah, "I will go down between you and the prince."

They then all descended and roved with wonder through the labyrinth of subterraneous passages, where the bodies were laid in rows on either side.

CHAP. XLVIII.

IMLAC DISCOURSES ON THE NATURE OF THE SOUL.

"WHAT reason," said the prince, "can be given, why the Egyptians should thus expensively preserve those carcases which some nations consume with fire, others lay to mingle with the earth, and all agree to remove from their sight, as soon as decent rites can be performed?"

"The original of ancient customs," said Imlac, "is commonly unknown; for the practice often continues when the cause has ceased; and concerning superstitious ceremonies it is vain to conjecture; for

what reason did not dictate, reason cannot explain. I have long believed that the practice of embalming arose only from tenderness to the remains of relations or friends, and to this opinion I am more inclined, because it seems impossible that this care should have been general: had all the dead been embalmed, their repositories must in time have been more spacious than the dwellings of the living. I suppose only the rich or honourable were secured from corruption, and the rest left to the course of nature.

"But it is commonly supposed that the Egyptians believed the soul to live as long as the body continued undissolved, and therefore tried this method of eluding death."

"Could the wise Egyptians," said Nekayah, "think so grossly of the soul? If the soul could once survive its separation, what could it afterwards receive or suffer from the body?"

"The Egyptians would doubtless think erroneously," said the astronomer, "in the darkness of heathenism, and the first dawn of philosophy. The nature of the soul is still disputed amidst all our opportunities of clearer knowledge: some yet say that it may be material, who, nevertheless, believe it to be immortal."

"Some," answered Imlac, "have indeed said that the soul is material, but I can scarcely believe that any man thought it, who knew how to think; for all the conclusions of reason enforce the immateriality of mind, and all the notices of sense and investigations of science concur to prove the unconsciousness of matter."

"It was never supposed that cogitation is inherent in matter, or that every particle is a thinking being. Yet, if any part of matter be devoid of thought, what part can we suppose to think? Matter can differ from matter only in form, density, bulk, motion, and direction of motion: to which of these, however varied or combined, can consciousness be annexed? To be round or square, to be solid or fluid, to be great or little, to be moved slowly or swiftly one way or another, are modes of material existence, all equally alien from the nature of cogitation. If matter be once without thought, it can only be made to think by some new modification, but all the modifications which it can admit are equally unconnected with cogitative powers."

"But the materialists," said the astronomer, "urge that matter may have qualities with which we are unacquainted."

"He who will determine," returned Imlac, "against that which he knows, because there may be something which he knows not; he that can set hypothetical possibility against acknowledged certainty, is not to be admitted among reasonable beings. All that we know of matter is, that matter is inert, senseless, and lifeless; and if this conviction cannot be opposed but by referring us to something that we know not, we have all the evidence that human intellect can admit. If that which is known may be overruled by that which is unknown, no being, not omniscient, can arrive at certainty."

"Yet let us not," said the astronomer, "too arrogantly limit the Creator's power."

"It is no limitation of omnipotence," replied the poet, "to suppose that one thing is not consistent with another, that the same proposition

cannot be at once true and false, that the same number cannot be even and odd, that cogitation cannot be conferred on that which is created incapable of cogitation."

"I know not," said Nekayah, "any great use of this question. Does that immateriality, which, in my opinion, you have sufficiently proved, necessarily include eternal duration?"

"Of immateriality," said Imlac, "our ideas are negative, and therefore obscure. Immateriality seems to imply a natural power of perpetual duration as a consequence of exemption from all causes of decay: whatever perishes is destroyed by the solution of its contexture, and separation of its parts; nor can we conceive how that which has no parts, and therefore admits no solution, can be naturally corrupted or impaired."

"I know not," said Rasselas, "how to conceive any thing without extension; what is extended must have parts, and you allow, that whatever has parts may be destroyed."

"Consider your own conceptions," replied Imlac, "and the difficulty will be less. You will find substance without extension. An ideal form is no less real than material bulk; yet an ideal form has no extension. It is no less certain, when you think on a pyramid, that your mind possesses the idea of a pyramid, than that the pyramid itself is standing. What space does the idea of a pyramid occupy more than the idea of a grain of corn? or how can either idea suffer laceration? As is the effect, such is the cause: as thought, such is the power that thinks; a power impassive and indiscrutable."

"But the Being," said Nekayah, "whom I fear to name, the Being which made the soul, can destroy it."

"He, surely, can destroy it," answered Imlac, "since, however unperishable, it receives from a superior nature its power of duration. That it will not perish by any inherent cause of decay, or principle of corruption, may be shown by philosophy: but philosophy can tell no more. That it will not be annihilated by him that made it, we must humbly learn from higher authority."

The whole assembly stood awhile silent and collected. "Let us return," said Rasselas, "from this scene of mortality. How gloomy would be these mansions of the dead to him who did not know that he should never die; that what now acts shall continue its agency, and what now thinks shall think on for ever. Those that lie here stretched before us, the wise and the powerful of ancient times, warn us to remember the shortness of our present state: they were, perhaps, snatched away while they were busy like us in the choice of life."

"To me," said the princess, "the choice of life is become less important; I hope hereafter to think only on the choice of eternity."

They then hastened out of the caverns, and under the protection of their guard, returned to Cairo.

CHAP. XLIX.

THE CONCLUSION IN WHICH NOTHING IS CONCLUDED.

It was now the time of the inundation of the Nile: a few days after their visit to the Catacombs, the river began to rise.

They were confined to their house. The whole region being under water gave them no invitation to any excursions, and, being well supplied with materials or talk, they diverted themselves with comparisons of the different forms of life which they had observed, and with various schemes of happiness, which each of them had formed.

Pekuah was never so much charmed with any place as the convent of St. Anthony, where the Arab restored her to the princess, and wished only to fill it with pious maidens, and to be made prioress of the order: she was weary of expectation and disgust, and would gladly be fixed in some unvariable state.

The princess thought, that of all sublunary things, knowledge was the best: she desired first to learn all sciences, and then proposed to found a college of learned women, in which she would preside, that, by conversing with the old, and educating the young, she might divide her time between the acquisition and communication of wisdom, and raise up for the next age models of prudence, and patterns of piety.

The prince desired a little kingdom, in which he might administer justice in his own person, and see all the parts of the government with his own eyes; but he could never fix the limits of his dominion, and was always adding to the number of his subjects.

Imlac and the astronomer were contented to be driven along the stream of life, without directing their course to any particular port.

Of these wishes that they had formed they well knew that none could be obtained. They deliberated awhile what was to be done, and resolved, when the inundation should cease, to return to Abyssinia.

ON THE STUDY OF NATURAL PHILOSOPHY,

Being the third Chapter of Herschell's Natural Philosophy.

OF THE NATURE AND OBJECTS, IMMEDIATE AND COLLATERAL, OF PHYSICAL SCIENCE, AS REGARDED IN ITSELF, AND IN ITS APPLICATION TO THE PRACTICAL PURPOSES OF LIFE, AND ITS INFLUENCE ON THE WELL BEING AND PROGRESS OF SOCIETY.

THE first thing impressed on us from our earliest infancy is, that events do not succeed one another at random, but with a certain degree of order, regularity, and connection;—some constantly, and, as we are apt to think, immutably, — as the alternation of day and night, summer and winter,—others contingently, as the motion of a body from its place, if pushed, or the burning of a stick if thrust into the fire. The knowledge that the former class of events *has* gone on, uninterruptedly, for ages beyond all memory, impresses us with a strong expectation that it will continue to do so in the same manner; and thus our notion of an *order of nature* is originated and confirmed. If every thing were equally regular and periodical, and the succession of events liable to no change depending on our own will, it may be doubted whether we should ever think of looking for causes. No one regards the night as the cause of the day, or the day of night. They are alternate effects of a common cause, which their regular succession alone gives us no sufficient clue for determining. It is chiefly, perhaps entirely, from the other or contingent class of events that we gain our notions of cause and effect. From them alone we gather that there are such things as laws of nature. The very idea of a law includes that of contingency. “*Si quis mala carmina condidisset, fustē ferito* ;” if such a case arise, such a course shall be followed,—if the match be applied to the gunpowder, it will explode. Every law is a provision for cases which *may* occur, and has relation to an infinite number of cases that never have occurred, and never will. Now, it is this *pro vision, à priori*, for contingencies, this contemplation of possible occurrences, and predisposal of what shall happen, that impresses us with the notion of a *law* and a *cause*. Among all the possible combinations of the fifty or sixty elements which chemistry shows to exist on the earth, it is likely, nay almost certain, that *some* have never been formed; that some elements, in some proportions, and under some circumstances, have never yet been placed in relation with one another.

Yet no chemist can doubt that it is *already fixed* what they will do when the case does occur. They will obey certain laws, of which we know nothing at present, but which must *be* already fixed, or they could not be laws. It is not by habit, or by trial and failure, that they will learn what to do. When the contingency occurs, there will be no hesitation, no consultation;—their course will at once be decided, and will always be the same if it occur ever so often in succession, or in ever so many places at one and the same instant. This is the perfection of a law, that it includes all possible contingencies, and ensures implicit obedience,—and of this kind are the laws of nature.

This use of the word *law*, however, our readers will of course perceive has relation to us as understanding, rather than to the materials of which the universe consists as obeying, certain rules. To *obey* a law, to act in *compliance* with a rule, supposes an understanding and a will, a power of complying or not, in the being who obeys and complies, which we do not admit as belonging to mere matter. The Divine Author of the universe cannot be supposed to have laid down particular laws, enumerating all individual contingencies, which his materials have understood and obey,—this would be to attribute to him the imperfections of human legislation;—but rather, by creating them, endued with certain fixed qualities and powers, he has impressed them in their origin with the *spirit*, not the *letter*, of his law, and made all their subsequent combinations and relations inevitable consequences of this first impression, by which, however, we would no way be understood to deny the constant exercise of his direct power in maintaining the system of nature, or the ultimate emanation of every energy which material agents exert from his immediate will, acting in conformity with his own laws.

The discoveries of modern chemistry have gone far to establish the truth of an opinion entertained by some of the ancients, that the universe consists of distinct, separate, indivisible *atoms*, or individual beings so minute as to escape our senses, except when united by millions, and by this aggregation making up bodies of even the smallest visible bulk; and we have the strongest evidence that, although there exist great and essential differences in individuals among these atoms, they may yet all be arranged in a very limited number of groups or classes, all the individuals of each of which are, to all intents and purposes, *exactly alike* in all their properties. Now, when we see a great number of things precisely alike, we do not believe this similarity to have originated except from a common principle independent of them; and that we recognise this likeness, chiefly by the identity of their deportment under similar circumstances, strengthens rather than weakens the conclusion. A line of spinning-jennies,* or a regiment of soldiers dressed exactly alike, and going through precisely the same evolutions, gives us no idea of independent existence: we must see them act out of concert before we can believe them to have independent wills and properties, not impressed on them from without. And this conclusion, which would be strong even where there only two in-

* Little reels used in cotton mills to twist the thread.

dividuals precisely alike in *all* respects and *for ever*, acquires irresistible force when their number is multiplied beyond the power of imagination to conceive. If we mistake not, then, the discoveries alluded to effectually destroyed the idea of an *eternal self-existent matter*, by giving to each of its atoms the essential characters, at once, of a *manufactured article*, and a *subordinate agent*.

But to ascend to the origin of things, and speculate on the creation, is not the business of the natural philosopher. An humbler field is sufficient for him in the endeavour to discover, as far as our faculties will permit, what are these primary qualities originally and unalterably impressed on matter, and to discover the *spirit* of the laws of nature, which includes groups and classes of relations and facts from the *letter* which, as before observed, is presented to us by single phenomena: or if, after all, this should prove impossible; if such a step be beyond our faculties; and the essential qualities of material agents be really *occult*, or incapable of being expressed in any form intelligible to our understandings, at least to approach as near to their comprehension as the nature of the case will allow; and devise such forms of words as shall include and *represent* the greatest possible multitude and variety of phenomena.

Now in this research there would seem one great question to be disposed of before our enquiries can even be commenced with any thing like a prospect of success, which is, whether the laws of nature themselves *have* that degree of permanence and fixity which can render them subjects of systematic discussion; or whether, on the other hand, the qualities of natural agents are subject to mutation from the lapse of time. To the ancients, who lived in the infancy of the world, or rather, in the infancy of man's experience, this was a very rational subject of question, and hence their distinctions between corruptible and incorruptible matter. Thus, according to some among them, the matter only of the celestial spaces is pure, immutable, and incorruptible, while all sublunary things are in a constant state of lapse and change; the world becoming paralysed and effete with age, and man himself deteriorating in character, and diminishing at once in intellectual and bodily stature. But to us, who have the experience of some additional thousands of years, the question of permanence is already, in a great measure, decided in the affirmative. The refined speculations of modern astronomy, grounding their conclusions on observations made at very remote periods, have proved to demonstration, that one at least of the great powers of nature, the force of gravitation, the main bond and support of the material universe, has undergone no change in intensity from a high antiquity. The stature of mankind is just what it was three thousand years ago, as the specimens of mummies which have been examined at various times sufficiently show. The intellect of Newton, Laplace, or La Grange, may stand in fair competition with that of Archimedes, Aristotle, or Plato; and the virtues and patriotism of Washington with the brightest examples of ancient history.

Again, the researches of chemists have shown that what the vulgar call corruption, destruction, &c., is nothing but a change of arrange-

ment of the same ingredient elements, the disposition of the same materials into other forms, without the loss or actual destruction of a single atom; and thus any doubts of the permanence of natural laws are discountenanced, and the whole weight of *appearances* thrown into the opposite scale. One of the most obvious cases of apparent destruction is, when any thing is ground to dust and scattered to the winds. But it is one thing to grind a fabric to powder, and another to annihilate its materials: scattered as they may be, they must fall somewhere, and continue, if only as ingredients of the soil, to perform their humble but useful part in the economy of nature. The destruction produced by fire is more striking: in many cases, as in the burning of a piece of charcoal or a taper, there is no smoke, nothing visibly dissipated and carried away; the burning body wastes and disappears, while nothing *seems* to be produced but warmth and light, which we are not in the habit of considering as substances; and when all has disappeared, except perhaps some trifling ashes, we naturally enough suppose it is gone, lost, destroyed. But when the question is examined more exactly, we detect, in the invisible stream of heated air which ascends from the glowing coal or flaming wax, the *whole* ponderable matter, only united in a new combination with the air, and dissolved in it. Yet, so far from being thereby destroyed, it is only become again what it was before it existed in the form of charcoal or wax, an active agent in the business of the world, and a main support of vegetable and animal life, and is still susceptible of running again and again the same round, as circumstances may determine; so that, for aught we can see to the contrary, the same identical atom may lie concealed for thousands of centuries in a limestone rock; may at length be quarried, set free in the limekiln, mix with the air, be absorbed from it by plants, and, in succession, become a part of the frames of myriads of living beings, till some concurrence of events consigns it once more to a long repose, which, however, no way unfits it from again resuming its former activity.

Now, this absolute indestructibility of the ultimate materials of the world, in periods commensurate to our experience, and their obstinate retention of the same properties, under whatever variety of circumstances we choose to place them, however violent and seemingly contradictory to their natures, is, of itself, enough to render it highly improbable that time alone should have any influence over them. All that age or decay can do seems to be included in a wasting of parts which are only dissipated, not destroyed, or in a change of sensible properties, which chemistry demonstrates to arise only from new combinations of the same ingredients. But, after all, the question is one entirely of experience: we cannot be sure, *à priori*, that the laws of nature are *immutable*; but we can ascertain, by enquiry, *whether they change or not*; and to this inquiry all experience answers in the negative. It is not, of course, intended here to deny that great operations, productive of extensive changes in the visible state of nature,—such as, for instance, those contemplated by the geologists, and embracing for their completion vast periods of time,—are constantly going on; but these are consequences and fulfilments of the laws of nature, not contradic-

tions or exceptions to them. No theorist regards such changes as alterations in the fundamental principles of nature; he only endeavours to reconcile them, and show how they result from laws already known, and judges of the correctness of his theory by their ultimate agreement.

But the laws of nature are not only permanent, but consistent, intelligible, and discoverable with such a moderate degree of research, as is calculated rather to stimulate than to weary curiosity. If we were set down, as creatures of another world, in any existing society of mankind, and began to speculate on their actions, we should find it difficult at first to ascertain whether they were subject to any laws at all; but when, by degrees, we had found out that they did consider themselves to be so; and would then proceed to ascertain, from their conduct and its consequences, what these laws were, and in what spirit conceived; though we might not perhaps have much difficulty in discovering single rules applicable to particular cases, yet, the moment we came to generalise, and endeavour from these to ascend, step by step, and discover any steady pervading principle, the mass of incongruities, absurdities, and contradictions, we should encounter, would either dishearten us from further enquiry, or satisfy us that what we were in search of did not exist. It is quite the contrary in nature; there we find no contradictions, no incongruities, but all is harmony. What once is learnt we never have to unlearn. As rules advance in generality, apparent exceptions become regular; and equivocal, in her sublime legislation, is as unheard of as maladministration.

Living, then, in a world where such laws obtain, and under their immediate dominion, it is manifestly of the utmost importance to know them, were it for no other reason than to be sure, in all we undertake, to have, at least, the law on our side, so as not to struggle in vain against some insuperable difficulty opposed to us by natural causes. What pains and expense would not the alchemists, for instance, have been spared by a knowledge of those simple laws of composition and decomposition, which now preclude all idea of the attainment of their declared object! what an amount of ingenuity, thrown away on the pursuit of the perpetual motion, might have been turned to better use, if the simplest laws of mechanics had been known and attended to by the inventors of innumerable contrivances destined to that end! What tortures, inflicted on patients by imaginary cures of incurable diseases, might have been dispensed with, had a few simple principles of physiology been earlier recognised!

But if the laws of nature, on the one hand, are invincible opponents, on the other, they are irresistible auxiliaries; and it will not be amiss if we regard them in each of those characters, and consider the great importance of a knowledge of them to mankind,—

- I. *In showing us how to avoid attempting impossibilities.*
- II. *In securing us from important mistakes in attempting what is, in itself, possible, by means either inadequate, or actually opposed, to the end in view.*
- III. *In enabling us to accomplish our ends in the easiest, shortest, most economical, and most effectual manner.*
- IV. *In inducing us to attempt, and enabling us to accomplish,*

objects which, but for such knowledge, we should never have thought of undertaking.

We shall therefore proceed to illustrate by examples the effect of physical knowledge under each of these heads :—

Ex. 1. It is not many years since an attempt was made to establish a colliery at Bexhill, in Sussex. The appearance of thin seams and sheets of fossil-wood and wood-coal, with some other indications similar to what occur in the neighbourhood of the great coal-beds in the north of England, having led to the sinking of a shaft, and the erection of machinery on a scale of vast expense, not less than eighty thousand pounds are said to have been laid out on this project, which, it is almost needless to add, proved completely abortive, as every geologist would have at once declared it must, the whole assemblage of geological facts being adverse to the existence of a regular coal-bed in the Hastings' sand; while this, on which Bexhill is situated, is separated from the *coal-strata* by a series of interposed beds of such enormous thickness as to render all idea of penetrating *through* them absurd. The history of mining operations is full of similar cases, where a very moderate acquaintance with the *usual order of nature*, to say nothing of theoretical views, would have saved many a sanguine adventurer from utter ruin.

Ex. 2. The smelting of iron requires the application of the most violent heat that can be raised, and is commonly performed in tall furnaces, urged by great iron bellows driven by steam engines. Instead of employing this power to force *air* into the furnace through the intervention of bellows, it was, on one occasion, attempted to employ the steam itself in, apparently, a much less circuitous manner; viz. by directing the current of steam in a violent blast, from the boiler at once into the fire. From one of the known ingredients of steam being a highly inflammable body, and the other that essential part of the air which supports combustion, it was imagined that this would have the effect of increasing the fire to tenfold fury, whereas it simply *blew it out*; a result which a slight consideration of the laws of chemical combination, and the state in which the ingredient elements exist in steam, would have enabled any one to predict without a trial.

Ex. 3. After the invention of the diving-bell, and its success in subaqueous processes, it was considered highly desirable to devise some means of remaining for any length of time under water, and rising at pleasure without assistance, so as either to examine, at leisure, the bottom, or perform, at ease, any work that might be required. Some years ago, an ingenious individual proposed a project by which this end was to be accomplished. It consisted in sinking the hull of a ship made quite water-tight, with the decks and sides strongly supported by shores, and the only entry secured by a stout trap-door, in such a manner, that by disengaging, from within, the weights employed to sink it, it might rise of itself to the surface. To render the trial more satisfactory, and the result more striking, the projector himself made the first essay. It was agreed that he should sink in twenty fathoms water, and rise again without assistance at the expiration of twenty-four hours. Accordingly, making all

secure, fastening down his trap-door, and provided with all necessities, as well as with the means of making signals to indicate his situation, this unhappy victim of his own ingenuity entered and was sunk. No signal was made, and the time appointed elapsed. An immense concourse of people had assembled to witness his rising, but in vain; for the vessel was never seen more. The pressure of the water at so great a depth had, no doubt, been completely under-estimated, and the sides of the vessel being at once crushed in, the unfortunate projector perished before he could even make the signal concerted to indicate his distress.

Ex. 4. In the granite quarries near Seringapatam the most enormous blocks are separated from the solid rock by the following neat and simple process. The workman having found a portion of the rock sufficiently extensive, and situated near the edge of the part already quarried, lays bare the upper surface, and marks on it a line in the direction of the intended separation, along which a groove is cut with a chisel about a couple of inches in depth. Above this groove a narrow line of fire is then kindled, and maintained till the rock below is thoroughly heated, immediately on which a line of men and women, each provided with a pot full of cold water, suddenly sweep off the ashes, and pour the water into the heated groove, when the rock at once splits with a clean fracture. Square blocks of six feet in the side, and upwards of eighty feet in length, are sometimes detached by this method, or by another equally simple and efficacious, but not easily explained without entering into particulars of mineralogical detail.*

Ex. 5. Hardly less simple and efficacious is the process used in some parts of France, where mill-stones are made. When a mass of stone sufficiently large is found, it is cut into a cylinder several feet high, and the question then arises how to subdivide this into horizontal pieces so as to make as many mill-stones. For this purpose horizontal indentations or grooves are chiselled out quite round the cylinder, at distances corresponding to the thickness intended to be given to the mill-stones, into which wedges of dried wood are driven. These are then wetted, or exposed to the night dew, and next morning the different pieces are found separated from each other by the expansion of the wood, consequent on its absorption of moisture; an irresistible natural power thus accomplishing, almost without any trouble, and at no expense, an operation which, from the peculiar hardness and texture of the stone, would otherwise be impracticable but by the most powerful machinery or the most persevering labour.

Ex. 6. To accomplish our ends quickly is often of, at least, as much importance as to accomplish them with little labour and expense. There are innumerable processes which, if left to themselves, *i. e.* to the ordinary operation of natural causes, are done, and well

* Such a block would weigh between four and five hundred thousand pounds. See Dr. Kennedy's "Account of the Erection of a Granite Obelisk of a single stone about Seventy Feet high, at Seringapatam."—Ed. Phil. Trans. vol. ix. p. 312.

done, but with extreme slowness, and in such cases it is often of the highest practical importance to accelerate them. The bleaching of linen, for instance, performed in the natural way by exposure to sun, rain, and wind, requires many weeks or even months for its completion; whereas, by the simple immersion of the cloth in a liquid, chemically prepared, the same effect is produced in a few hours. The whole circle of the arts, indeed, is nothing but one continued comment upon this head of our subject. The instances above given are selected, not on account of their superior importance, but for the simplicity and *directness* of application of the principles on which they depend, to the objects intended to be attained.

But so constituted is the mind of man, that his views enlarge, and his desires and wants increase, in the full proportion of the facilities afforded to their gratification, and indeed, with augmented rapidity, so that no sooner has the successful exercise of his powers accomplished any considerable simplification or improvement of processes subservient to his use or comfort, than his faculties are again on the stretch to extend the limits of his newly acquired power; and having once experienced the advantages which are to be gathered by availing himself of some of the powers of nature to accomplish his ends, he is led thenceforward to regard them all as a treasure placed at his disposal, if he have only the art, the industry, or the good fortune, to penetrate those recesses which conceal them from immediate view. Having once learned to look on knowledge as power, and to avail himself of it as such, he is no longer content to limit his enterprises to the beaten track of former usage, but is constantly led onwards to contemplate objects which, in a previous stage of his progress, he would have regarded as unattainable and visionary, had he even thought of them at all. It is here that the investigation of the hidden powers of nature becomes a mine, every vein of which is pregnant with inexhaustible wealth, and whose ramifications appear to extend in all directions wherever human wants or curiosity may lead us to explore.

Between the physical sciences and the arts of life there subsists a constant mutual interchange of good offices, and no considerable progress can be made in the one without of necessity giving rise to corresponding steps in the other. On the one hand, every art is in some measure, and many entirely, dependent on those very powers and qualities of the material world which it is the object of physical enquiry to investigate and explain; and, accordingly, abundant examples might be cited of cases where the remarks of experienced artists, or even ordinary workmen, have led to the discovery of natural qualities, elements, or combinations which have proved of the highest importance in physics. Thus (to give an instance), a soap-manufacturer remarks that the residuum of his ley, when exhausted of the alkali for which he employs it, produces a corrosion of his copper boiler for which he cannot account. He puts it into the hands of a scientific chemist for analysis, and the result is the discovery of one of the most singular and important chemical elements, iodine. The properties of this, being studied, are found to occur most appositely in illustration and support of a variety of new, curious, and

instructive views then gaining ground in chemistry, and thus exercise a marked influence over the whole body of that science. Curiosity is excited: the origin of the new substance is traced to the sea-plants from whose ashes the principal ingredient of soap is obtained, and ultimately to the sea-water itself. It is thence hunted through nature, discovered in salt mines and springs, and pursued into all bodies which have a marine origin; among the rest, into sponge. A medical practitioner* then calls to mind a reputed remedy for the cure of one of the most grievous and unsightly disorders to which the human species is subject—the *goître*—which infests the inhabitants of mountainous districts to an extent that in this favoured land we have happily no experience of, and which was said to have been originally cured by the ashes of burnt sponge. Led by this indication he tries the effect of iodine on that complaint, and the result establishes the extraordinary fact that this singular substance, taken as a medicine, acts with the utmost promptitude and energy on *goître*, dissipating the largest and most inveterate in a short time, and acting (of course, like all medicines, even the most approved, with occasional failures,) as a specific, or natural antagonist, against that odious deformity. It is thus that any accession to our knowledge of nature is sure, sooner or later, to make itself felt in some practical application, and that a benefit conferred on science by the casual observation or shrewd remark of even an unscientific or illiterate person infallibly repays itself with interest, though often in a way that could never have been at first contemplated.

It is to such observation, reflected upon, however, and matured into a rational and scientific form by a mind deeply imbued with the best principles of sound philosophy, that we owe the practice of vaccination; a practice which has effectually subdued, in every country where it has been introduced, one of the most frightful scourges of the human race, and in some extirpated it altogether. Happily for us we know only by tradition the ravages of the small-pox, as it existed among us hardly more than a century ago, and as it would in a few years infallibly exist again, were the barriers which this practice, and that of inoculation, oppose to its progress abandoned. Hardly inferior to this terrible scourge on land was, within the last seventy or eighty years, the scurvy at sea. The sufferings and destruction produced by this horrid disorder on board our ships when, as a matter of course, it broke out after a few months' voyage, seem now almost incredible. Deaths to the amount of eight or ten a day in a moderate ship's company; bodies sewn up in hammocks and washing about the decks for want of strength and spirits on the part of the miserable survivors to cast them overboard; and every form of loathsome and excruciating misery of which the human frame is susceptible:—such are the pictures which the narratives of nautical adventure in those days continually offer.† At present the scurvy is almost completely eradi-

* Dr. Coindet of Geneva,

† Journal of a Voyage to the South Seas, &c. &c., under the Command of Commodore George Anson in 1743—1744, by Pascoe Thomas, Lond. 1745. So tremendous were the ravages of scurvy, that, in the year 1726, Admiral

cated in the navy, partly, no doubt, from increased and increasing attention to general cleanliness, comfort, and diet; but mainly from the constant use of a simple and palatable preventive, the acid of the lemon, served out in daily rations. If the gratitude of mankind be allowed on all hands to be the just meed of the philosophic physician, to whose discernment in seizing, and perseverance in forcing it on public notice we owe the great safeguard of infant life, it ought not to be denied to those* whose skill and discrimination have thus strengthened the sinews of our most powerful arm, and obliterated one of the darkest features in the most glorious of all professions.

Hosier sailed with seven ships of the line to the West Indies, and buried his ships' companies twice, and died himself in consequence of a broken heart. Dr. Johnson, in the year 1778, could describe a sea-life in such terms as these:—"As to the sailor, when you look down from the quarter deck to the space below, you see the utmost extremity of human misery, such crowding, such filth, such stench!"—"A ship is a prison with the chance of being drowned—it is worse—worse in every respect—worse room, worse air, worse food—worse company!" Smollet, who had personal experience of the horrors of a seafaring life in those days, gives a lively picture of them in his *Roderick Random*.

* Lemon juice was known to be a remedy for scurvy far superior to all others 200 years ago, as appears by the writings of Woodall. His work is entitled "*The Surgeon's Mate, or Military and Domestic Medicine*. By John Woodall, Master in Surgery, London, 1636," p. 165. In 1600, Commodore Lancaster sailed from England with three other ships for the Cape of Good Hope on the 2nd of April, and arrived in Saldanha Bay on the 1st of August, the commodore's own ship being in perfect health, from the administration of three table-spoonsfull of lemon juice every morning to each of his men, whereas the other ships were so sickly as to be unmanageable for want of hands, and the commander was obliged to send men on board to take in their sails and hoist out their boats. (*Purchas's Pilgrim*, vol. i. p. 149.) A Fellow of the college, and an eminent practitioner, in 1753 published a tract on sea scurvy, in which he adverts to the superior virtue of this medicine; and Mr. A. Baird, surgeon of the *Hector* sloop of war, states, that from what he had seen of its effects on board of that ship, he "thinks he shall not be accused of presumption in pronouncing it, if properly administered, a most infallible remedy, both in the cure and prevention of scurvy." (*Vide Trotter's Medicina Nautica*.) The precautions adopted by Captain Cook in his celebrated voyages, had fully demonstrated by their complete success the practicability of keeping scurvy under in the longest voyages, but a uniform system of prevention throughout the service was still deficient.

It is to the representations of Dr. Blair and Sir Gilbert Blane, in their capacity of Commissioners of the Board for sick and wounded seamen, in 1795, we believe, that its systematic introduction into nautical diet, by a general order of the admiralty, is owing. The effect of this wise measure (taken, of course, in conjunction with the general causes of improved health,) may be estimated from the following facts:—In 1780, the number of cases of scurvy received into Haslar hospital was 1457; in 1806 one only, and in 1807 one. There are now many surgeons in the navy who have never seen the disease.

These last, however, are instances of simple observation, limited to the point immediately in view, and assuming only so far the character of science as a systematic adoption of good and rejection of evil, when grounded on experience carefully weighed, justly entitle it to do. They are not on that account less appositely cited as instances of the importance of a knowledge of nature and its laws to our well being; though, like the great inventions of the mariner's compass and of gunpowder, they may have stood, in their origin, unconnected with more general views. They are rather to be looked upon as the spontaneous produce of a territory essentially fertile, than as forming part of the succession of harvests which the same bountiful soil, diligently cultivated, is capable of yielding. The history of iodine above related affords, however, a perfect specimen of the manner in which a knowledge of natural properties and laws, collected from facts having no reference to the object to which they have been subsequently applied, enables us to set in array the resources of nature against herself; and deliberately, of afore-thought, to devise remedies against the dangers and inconveniences which beset us. In this view we might instance, too, the *conductor*, which, in countries where thunder-storms are more frequent and violent than in our own, and at sea (where they are attended with peculiar danger, both from the greater probability of accident, and its more terrible consequences when it does occur,) forms a most real and efficient preservative against the effects of lightning*:—the *safety lamp*, which enables us to walk with light and security while surrounded with an atmosphere more explosive than gunpowder:—the *life-boat*, which cannot be sunk, and which offers relief in circumstances of all others the most distressing to humanity, and of which a recent invention promises to extend the principle to ships of the largest class:—the *lighthouse*, with the capital improvements which the lenses of Brewster and Fresnel, and the elegant lamp of Lieutenant Drummond, have conferred, and promised yet to confer by their wonderful powers, the one of producing the most intense light yet known, the others of conveying it undispersed to great distances:—the discovery of the disinfectant powers of chlorine, and its application to the destruction of miasma and contagion:—that of *quinine*, the essential principle in which reside the febrifuge qualities of the Peruvian bark, a discovery by which posterity is yet to benefit in its full extent, but which has already begun to diffuse *comparative* comfort and health through regions almost desolated by pestiferous exhalations;†— and, if we desist, it is not because the list is exhausted, but because a sample, not a catalogue, is intended.

* Throughout France the conductor is recognised as a most valuable and useful instrument; and in those parts of Germany where thunder-storms are still more common and tremendous, they are become nearly universal. In Munich there is hardly a modern house unprovided with them, and of a much better construction than ours—several copper wires twisted into a rope.

† We have been informed by an eminent physician in Rome, (Dr. Morichini) that a vast quantity of the sulphate of quinine is manufactured there

One instance more, however, we will add, to illustrate the manner in which a most familiar effect, which seemed destined only to amuse children, or, at best, to furnish a philosophic toy, may become a safeguard of human life, and a remedy for a most serious and distressing evil. In needle manufactories the workmen who point the needles are constantly exposed to excessively minute particles of steel which fly from the grindstones, and mix, though imperceptible to the eye, as the finest dust in the air, and are inhaled with their breath. The effect, though imperceptible on a short exposure, yet, being constantly repeated from day to day, produces a constitutional irritation dependant on the tonic properties of the steel, which is sure to terminate in pulmonary consumption; insomuch, that persons employed in this kind of work used scarcely ever to attain the age of forty years.* In vain was it attempted to purify the air before its entry into the lungs by gauzes or linen guards; the dust was too fine and penetrating to be obstructed by such coarse expedients, till some ingenious person bethought him of that wonderful power which every child who searches for its mother's needle with a magnet, or admires the motions and arrangement of a few steel filings on a sheet of paper held above it, sees in exercise. Masks of magnetised steel wire are now constructed and adapted to the faces of the workmen. By these the air is not merely *strained* but *searched* in its passage through them, and each obnoxious atom arrested and removed.

Perhaps there is no result which places in a stronger light the advantages which are to be derived from a mere knowledge of the *usual order of nature*, without any attempt on our part to modify it, and apart from all consideration of its causes, than the institution of life-assurances. Nothing is more uncertain than the life of a single individual; and it is the sense of this insecurity which has given rise to such institutions. They are, in their nature and objects, the precise reverse of gambling speculations, their object being to equalise vicissitude, and to place the pecuniary relations of numerous masses of mankind, in so far as they extend, on a footing independent of individual casualty. To do this with the greatest possible advantage, or indeed with any advantage at all, it is necessary to know the *laws of mortality*, or the average numbers of individuals, out of a great multitude, who die at every period of life from infancy to extreme-old age. At first sight this would seem a hopeless enquiry; to some, perhaps, a presumptuous one. But it has been made; and the result is, that, abating extraordinary causes, such as wars, pestilence, and the like, a remarkable regularity *does* obtain, quite sufficient to afford grounds not only for general estimations, but for nice calculations of risk and adventure, such as infallibly to insure the success of any such institution founded on good computations; and thus to confer such stability on the fortunes of families dependent on the exertions of one individual

and consumed in the Campagna, with an evident effect in mitigating the severity of the malarious complaints which affect its inhabitants.

* Dr. Johnson, Memoirs of the Medical Society, vol. v.

as to constitute an important feature in modern civilisation. The only thing to be feared in such institutions is their too great multiplication and consequent competition, by which a spirit of gambling and underbidding is liable to be generated among their conductors, and the very mischief may be produced, on a scale of frightful extent, which they are especially intended to prevent.

We have hitherto considered only cases in which a knowledge of natural laws enables us to improve our condition, by counteracting evils of which, but for its possession, we must have remained for ever the helpless victims. Let us now take a similar view of those in which we are enabled to call in nature as an auxiliary to augment our actual power, and capacitate us for undertakings which, without such aid, might seem to be hopeless. Now, to this end, it is necessary that we should form a just conception of what those hidden powers of nature *are*, which we can at pleasure call into action;—how far they transcend the measure of human force, and set at naught the efforts not only of individuals but of whole nations of men.

It is well known to modern engineers, that *there is virtue* in a bushel of coals properly consumed, to raise seventy millions of pounds weight a foot high. This is actually the *average* effect of an engine at this moment working in Cornwall.* Let us pause a moment, and consider what this is equivalent to in matters of practice.

The ascent of Mont Blanc from the valley of Chamouni is considered, and with justice, as the most toilsome feat that a strong man can execute in two days. The combustion of two pounds of coal would place him on the summit.†

The Menai Bridge, one of the most stupendous works of art that has been raised by man in modern ages, consists of a mass of iron, not less than four millions of pounds in weight, suspended at a medium height of about 120 feet above the sea. The consumption of seven bushels of coal would suffice to raise it to the place where it hangs.

The great pyramid of Egypt is composed of granite. It is 700 feet in the side of its base, and 500 in perpendicular height, and stands on eleven acres of ground. Its weight is, therefore, 12,760 millions of pounds, at a medium height of 125 feet; consequently it would be raised by the effort of about 630 chaldrons of coal, a quantity consumed in some founderies in a week.

The annual consumption of coal in London is estimated at 1,500,000 chaldrons. The effort of this quantity would suffice to raise a cubical block of marble, 2,200 feet in the side, through a space equal to its own height, or to pile one such mountain upon another. The

* The engine at Huel Towan. See Mr. Henwood's Statement "of the performance of steam-engines in Cornwall, for April, May, and June, 1829." Brewster's Journal, Oct. 1829.—The highest monthly average of this engine extends to 79 millions of pounds.

† However, this is not quite a fair statement; a man's daily labour is about 4 lbs. of coals. The extreme toil of this ascent arises from other obvious causes than the mere height.

Monte Nuovo, near Pozzuoli, (which was erupted in a single night by volcanic fire,) might have been raised by such an effort, from a depth of 40,000 feet, or about eight miles.

It will be observed, that, in the above statement, the inherent power of fuel is, of necessity, greatly under-rated. It is not pretended by engineers that the economy of fuel is yet pushed to its utmost limit, or that the whole effective power is obtained in any application of fire yet devised; so that were we to say 100 millions instead of 70, we should probably be nearer the truth.

The powers of wind and water, which we are constantly impressing into our service, can scarcely be called latent or hidden, yet it is not fully considered, in general, what they *do* effect for us. Those who would judge of what advantage may be taken of the wind, for example, even on land (not to speak of navigation,) may turn their eyes on Holland. A great portion of the most valuable and populous tract of this country lies much below the level of the sea, and is only preserved from inundation by the maintenance of embankments. Though these suffice to keep out the abrupt influx of the ocean, they cannot oppose that law of nature, by which fluids, in seeking their level, insinuate themselves through the pores and subterraneous channels of a loose sandy soil, and keep the country in a constant state of infiltration from below upwards. To counteract this tendency, as well as to get rid of the rain water, which has no natural outlet, pumps worked by windmills are established in great numbers, on the dams and embankments, which pour out the water, as from a leaky ship, and in effect preserve the country from submersion, by taking advantage of every wind that blows. To drain the Haarlem lake* would seem a hopeless project to any speculators but those who had the steam-engine at their command, or had learnt in Holland what might be accomplished by the constant agency of the desultory but unwearied powers of wind. But the Dutch engineer measures his surface, calculates the number of his pumps, and, trusting to time and his experience of the operation of the winds for the success of his undertaking, boldly forms his plans to lay dry the bed of an inland sea, of which those who stand on one shore cannot see the other.†

To gunpowder, as a source of mechanical power, it seems hardly necessary to call attention; yet it is only when we endeavour to *confine* it, that we get a full conception of the immense energy of that astonishing agent. In Count Rumford's experiments, twenty-eight grains of powder confined in a cylindrical space, *which it just filled*, tore asun-

* Its surface is about 40,000 acres, and medium depth about 20 feet. It was proposed to drain it by running embankments across it, and thus cutting it up into more manageable portions to be drained by windmills.

† No one doubts the practicability of the undertaking. Eight or nine thousand chaldrons of coals duly burnt would evacuate the whole contents. But many doubt whether it would be profitable, and some, considering that a few hundreds of fishermen who gain their livelihood on its waters would be dispossessed, deny that it would be desirable.

der a piece of iron which would have resisted a strain of 400,000* lbs. applied at no greater mechanical disadvantage.

But chemistry furnishes us with means of calling into sudden action forces of a character infinitely more tremendous than that of gunpowder. The terrific violence of the different fulminating compositions is such, that they can only be compared to those untameable animals, whose ferocious strength has hitherto defied all useful management, or rather to spirits evoked by the spells of a magician, manifesting a destructive and unapproachable power, which makes him but too happy to close his book, and break his wand, as the price of escaping unhurt from the storm he has raised. Such powers are not yet subdued to our purposes, whatever they may hereafter be; but, in the expansive force of gases, liberated slowly and manageably from chemical mixtures, we have a host of inferior, yet still most powerful, energies, capable of being employed in a variety of useful ways, according to emergencies.†

Such are the forces which nature lends us for the accomplishment of our purposes, and which it is the province of practical Mechanics to teach us to combine and apply in the most advantageous manner without which the mere command of power would amount to nothing. Practical Mechanics is, in the most pre-eminent sense, a *scientific art*, and it may be truly asserted, that almost all the great combinations of modern mechanism, and many of its refinements and nicer improvements, are creations of pure intellect, grounding its exertion upon a moderate number of very elementary propositions in theoretical mechanics and geometry. On this head we might dwell long, and find ample matter, both for reflection and wonder; but it would require not volumes merely, but libraries, to enumerate and describe the prodigies of ingenuity which have been lavished on every thing connected with machinery and engineering. By these it is that we are enabled to diffuse over the whole earth the productions of any part of it; to fill every corner of it with miracles of art and labour, in exchange for its peculiar commodities; and to concentrate around us, in our dwellings, apparel and utensils, the skill and workmanship not of a few expert individuals, but of all who, in the present and past generations, have contributed their improvements to the processes of our manufactures.

The transformations of chemistry, by which we are enabled to convert the most apparently useless materials into important objects in the arts, are opening up to us every day sources of wealth and convenience of which former ages had no idea, and which have been pure gifts of science to man. Every department of art has felt their influence, and new instances are continually starting forth of the

* "Experiments to determine the Force of fired Gunpowder." Phil. Trans. vol. lxxxvii. p. 254, et seq.

† See a very ingenious application of this kind in Mr. Babage's article on Diving in the Encyc. Metrop. Others will readily suggest themselves. For instance, the ballast in reserve of a balloon might consist of materials capable of evolving great quantities of hydrogen gas in proportion to their weight, should such be found.

unlimited resources which this wonderful science develops in the most sterile parts of nature. Not to mention the impulse which its progress has given to a host of other sciences, what strange and unexpected results has it not brought to light in its application to some of the most common objects! Who, for instance, would have conceived that linen rags were capable of producing *more than their own weight* of sugar, by the simple agency of one of the cheapest and most abundant acids? *—that dry bones could be a magazine of nutriment, capable of preservation for years, and ready to yield up their sustenance in the form best adapted to the support of life, on the application of that powerful agent, steam, which enters so largely into all our processes, or of an acid at once cheap and durable? †—that saw-dust itself is susceptible of conversion into a substance bearing no remote analogy to bread; and though certainly less palatable than that of flour, yet no way disagreeable, and both wholesome and digestible as well as highly nutritive? ‡ What economy, in all processes where chemical agents are employed, is introduced by the exact knowledge of the proportions in which natural elements unite, and their mental powers of displacing each other! What perfection in all the arts where fire is employed, either in its more violent applications. (as, for instance, in the smelting of metals by the introduction of well adapted fluxes, whereby we obtain the whole produce of the ore in its purest state,) or in its milder forms, as in sugar refining (the whole modern practice of which depends on a curious and delicate remark of a late eminent scientific chemist on the nice adjustment of temperature at which the crystallisation of syrup takes place); and a thousand other arts which it would be tedious to enumerate!

Armed with such powers and resources, it is no wonder if the enterprise of man should lead him to form and execute projects which, to one uninformed of their grounds, would seem altogether disproportionate. Were they to have been proposed at once, we should, no doubt, have rejected them as such: but developed as they have been, in the slow succession of ages, they have only taught us that things regarded impossible in one generation may become easy in the next; and that the power of man over nature is limited only by the one condition, that it must be exercised in conformity with the laws of nature. He must study those laws as he would the disposition of a horse he would ride, or the character of a nation he would govern; and the moment he presumes either to thwart her fundamental rules, or ventures to measure his strength with hers, he is at once rendered severely sensible of his imbecility, and meets the deserved punishment of his rashness and folly. But if, on the other hand, he will consent

* Bracconot. *Annales de Chimie*, vol. xii. p. 184.

† D'Arcet. *Annales de l'Industrie*. Fevrier, 1829.

‡ See Dr. Prout's account of the experiments of Professor Autenrieth of Tübingen. *Phil. Trans.* 1827, p. 381. This discovery, which renders famine next to impossible, deserves a higher degree of celebrity than it has obtained.

to use, without abusing, the resources thus abundantly placed at his disposal, and obey that he may command, there seems scarcely any conceivable limit to the degree in which the *average* physical condition of great masses of mankind may be improved, their wants supplied and their conveniences and comforts increased. Without adopting such an exaggerated view, as to assert that the meanest inhabitant of a civilised society is superior in physical condition to the lordly savage, whose energy and uncultivated ability gives him a natural predominance over his fellow denizens of the forest,—at least, if we compare like with like, and consider the multitude of human beings who are enabled, in an advanced state of society, to subsist in a degree of comfort and abundance, which at best only a few of the most fortunate in a less civilised state could command, we shall not be at a loss to perceive the principle on which we ought to rest our estimate of the advantages of civilisation; and which applies with hardly less force to every degree of it, when contrasted with that next inferior, than to the broad distinction between civilised and barbarous life in general.

The difference of the degrees in which the individuals of a great community enjoy the good things of life has been a theme of declamation and discontent in all ages; and it is doubtless our paramount duty, in every state of society, to alleviate the pressure of the purely evil part of this distribution as much as possible, and, by all the means we can devise, secure the lower links in the chain of society from dragging in dishonour and wretchedness; but there is a point of view in which the picture is at least materially altered in its expression. In comparing society on its present immense scale, with its infant or less developed state, we must at least take care to enlarge every feature in the same proportion. If, on comparing the *very* lowest states in civilised and savage life, we admit a difficulty in deciding to which the preference is due, at least in every superior grade we cannot hesitate a moment; and if we institute a similar comparison in every different stage of its progress, we cannot fail to be struck with the rapid *rate of dilatation* which every degree upward of the scale, so to speak, exhibits, and which, in an estimate of averages, gives an immense preponderance to the present over every former condition of mankind, and, for aught we can see to the contrary, will place succeeding generations in the same degree of superior relation to the present that this holds to those passed away. Or we may put the same proposition in other words, and, admitting the existence of every inferior grade of advantage in a higher state of civilisation which subsisted in the preceding, we shall find, first, that, taking state for state, the proportional numbers of those who enjoy the higher degrees of advantage increases with a constantly accelerated rapidity as society advances: and, secondly, that the superior extremity of the scale is constantly enlarging by the addition of new degrees. The condition of a European prince is now as far superior, in the command of real comforts and conveniences, to that of one in the middle ages, as that to the condition of one of his own dependants.

The advantages conferred by the augmentation of our physical resources through the medium of increased knowledge and improved

art have this peculiar and remarkable property,—that they are in their nature diffusive, and cannot be enjoyed in any exclusive manner by a few. An eastern despot may extort the riches and monopolise the art of his subjects for his own personal use; he may spread around him an unnatural splendour and luxury, and stand in strange and preposterous contrast with the general penury and discomfort of his people; he may glitter in jewels of gold and raiment of needlework; but the wonders of well contrived and executed manufacture which we use daily, and the comforts which have been invented, tried, and improved upon by thousands, in every form of domestic convenience, and for every ordinary purpose of life, can never be enjoyed by him. To produce a state of things in which the physical advantages of civilised life can exist in a high degree, the stimulus of increasing comforts and constantly elevated desires, must have been felt by millions; since it is not in the power of a few individuals to create that wide demand for useful and ingenious applications, which alone can lead to great and rapid improvements, unless backed by that arising from the speedy diffusion of the same advantages among the mass of mankind.

If this be true of physical advantages, it applies with still greater force to intellectual. Knowledge can neither be adequately cultivated nor adequately enjoyed by a few; and although the conditions of our existence on earth may be such as to preclude an abundant supply of the physical necessities of all who may be born, there is no such law of nature in force against that of our intellectual and moral wants. Knowledge is not, like food, destroyed by use, but rather augmented and perfected. It acquires not, perhaps, a greater certainty, but at least a confirmed authority and a probable duration, by universal assent; and there is no body of knowledge so complete, but that it may acquire accession, or so free from error but that it may receive correction in passing through the minds of millions. Those who admire and love knowledge for its own sake ought to wish to see its elements made accessible to all, were it only that they may be the more thoroughly examined into, and more effectually developed in their consequences, and receive that ductility and plastic quality which the pressure of minds of all descriptions, constantly moulding them to their purposes, can alone bestow. But to this end it is necessary that it should be divested, as far as possible, of artificial difficulties, and stripped of all such technicalities as tend to place it in the light of a craft and a mystery, inaccessible without a kind of apprenticeship. Science, of course, like every thing else, has its own peculiar terms, and so to speak, its idioms of language; and these it would be unwise, were it even possible, to relinquish: but every thing that tends to clothe it in a strange and repulsive garb, and especially every thing that, to keep up an appearance of superiority in its professors over the rest of mankind, assumes an unnecessary guise of profundity and obscurity, should be sacrificed without mercy. Not to do this, is to deliberately reject the light which the natural unencumbered good sense of mankind is capable of throwing on every subject, even in the elucidation of principles: but where principles

are to be applied to practical uses it becomes absolutely necessary ; as all mankind have then an interest in their being so familiarly understood, that no mistakes shall arise in their application.

The same remark applies to arts. They cannot be perfected till their whole processes are laid open, and their language simplified and rendered universally intelligible. Art is the application of knowledge to a practical end. If the knowledge be merely accumulated experience, the art is *empirical* ; but if it be experience reasoned upon and brought under general principles, it assumes a higher character, and becomes a *scientific art*. In the progress of mankind from barbarism to civilized life, the arts necessarily precede science. The wants and cravings of our animal constitution must be satisfied ; the comforts, and some of the luxuries, of life must exist. Something must be given to the vanity of show, and more to the pride of power : the round of baser pleasures must have been tried and found insufficient, before intellectual ones can gain a footing ; and when they have obtained it, the delights of poetry and its sister arts still take precedence of contemplative enjoyments, and the severer pursuits of thought ; and when these in time begin to charm from their novelty, and sciences begin to arise, they will at first be those of pure speculation. The mind delights to escape from the trammels which had bound it to earth, and luxuriates in its newly found powers. Hence, the abstractions of geometry—the properties of numbers—the movements of the celestial spheres—whatever is abstruse, remote, and extramundane—become the first objects of infant science. Applications come late : the arts continue slowly progressive, but their realm remains separated from that of science by a wide gulf which can only be passed by a powerful spring. They form their own language and their own conventions, which none but artists can understand. The whole tendency of empirical art is to bury itself in technicalities, and to place its pride in particular short cuts and mysteries known only to adepts ; to surprise and astonish by results, but conceal processes. The character of science is the direct contrary. It delights to lay itself open to enquiry ; and is not satisfied with its conclusions, till it can make the road to them broad and beaten : and in its applications it preserves the same character ; its whole aim being to strip away all technical mystery, to illuminate every dark recess, and to gain free access to all processes, with a view to improve them on rational principles. It would seem that a union of two qualities almost opposite to each other—a going forth of the thoughts in two directions, and a sudden transfer of ideas from a remote station in one to an equally distant one in the other—is required to start the first idea of *applying science*. Among the Greeks, this point was attained by Archimedes, but attained too late, on the eve of that great eclipse of science which was destined to continue for nearly eighteen centuries, till Galileo in Italy, and Bacon in England, at once dispelled the darkness : the one, by his inventions and discoveries ; the other, by the irresistible force of his arguments and eloquence.

Finally, the improvement effected in the condition of mankind by advances in physical science as applied to the useful purposes of life,

is very far from being limited to their direct consequences in the more abundant supply of our physical wants, and the increase of our comforts. Great as these benefits are, they are yet but steps to others of a still higher kind. The successful results of our experiments and reasonings in natural philosophy, and the incalculable advantages which experience, systematically consulted and dispassionately reasoned on, has conferred in matters purely physical, tend of necessity to impress something of the well weighed and progressive character of science on the more complicated conduct of our social and moral relations. It is thus that legislation and politics become gradually regarded as experimental sciences; and history, not, as formerly, the mere record of tyrannies and slaughters, which, by immortalising the execrable actions of one age, perpetuates the ambition of committing them in every succeeding one, but as the archive of experiments, successful and unsuccessful, gradually accumulating towards the solution of the grand problem—how the advantages of government are to be secured with the least possible inconvenience to the governed. The celebrated apothegm, that nations never profit by experience, becomes yearly more and more untrue. Political economy, at least, is found to have sound principles, founded in the moral and physical nature of man, which, however, lost sight of in particular measures—however even temporarily controverted and borne down by clamour—have yet a stronger and stronger testimony borne to them in each succeeding generation, by which they must, sooner or later, prevail. The idea once conceived and verified, that great and noble ends are to be achieved, by which the condition of the whole human species shall be permanently bettered, by bringing into exercise a sufficient quantity of sober thought, and by a proper adaptation of means, is of itself sufficient to set us earnestly on reflecting what ends *are* truly great and noble, either in themselves, or as conducive to others of a still loftier character; because we are not now, as heretofore, hopeless of attaining them. It is not now equally harmless and insignificant, whether we are right or wrong; since we are no longer supinely and helplessly carried down the stream of events, but feel ourselves capable of buffetting at least with its waves, and perhaps of riding triumphantly over them: for why should we despair that the reason which has enabled us to subdue all nature to our purposes, should (if permitted and assisted by the providence of God) achieve a far more difficult conquest; and ultimately find some means of enabling the collective wisdom of mankind to bear down those obstacles which individual short-sightedness, selfishness, and passion, oppose to all improvements, and by which the highest hopes are continually blighted, and the fairest prospects marred.

COMPARATIVE ANATOMY.

[From Chap. XII. of Paley's *Natural Theology*.]

WHENEVER we find a general plan pursued, yet with such variations in it, as are, in each case, required by the particular exigency of the subject to which it is applied, we possess, in such a plan and such adaptation, the strongest evidence that can be afforded of intelligence and design; an evidence which the most completely excludes every other hypothesis. If the general plan proceeded from any fixed necessity in the nature of things, how could it accommodate itself to the various wants and uses which it had to serve under different circumstances, and on different occasions? *Arkwright's* mill was invented for the spinning of cotton. We see it employed for the spinning of wool, flax, and hemp, with such modifications of the original principle, such variety in the same plan, as the texture of those different materials rendered necessary. Of the machine's being put together with design, if it were possible to doubt, whilst we saw it only under one mode, and in one form; when we came to observe it in its different applications, with such changes of structure, such additions and supplements, as the special and particular use in each case demanded, we could not refuse any longer our assent to the proposition, "that intelligence, properly and strictly so called (including under that name, foresight, consideration, reference to utility), had been employed, as well in the primitive plan, as in the several changes and accommodations which it is made to undergo."

Very much of this reasoning is applicable to what has been called *Comparative Anatomy*. In their general economy, in the outlines of the plan, in the construction as well as offices of their principal parts, there exists between all large terrestrial animals a close resemblance. In all, life is sustained, and the body nourished, by nearly the same apparatus. The heart, the lungs, the stomach, the liver, the kidneys, are much alike in all. The same fluid (for no distinction of blood has been observed) circulates through their vessels, and nearly in the same order. The same cause, therefore, whatever that cause was, has been concerned in the origin, has governed the production, of these different animal forms.

When we pass on to smaller animals, or to the inhabitants of a different element, the resemblance becomes more distant and more obscure; but still the plan accompanies us.

And, we can never enough commend, and which it is our business at present to exemplify, the plan is attended, through all its varieties and deflections, by subserviencies to special occasions and utilities.

I. The *covering* of different animals (though whether I am correct in classing this under their anatomy, I do not know) is the first thing which presents itself to our observation; and is, in truth, both for its variety and its suitableness to their several natures, as much to be admired as any part of their structure. We have bristles, hair, wool, furs, feathers, quills, prickles, scales; yet in this diversity, both of material and form, we cannot change one animal's coat for another, without evidently changing it for the worse: taking care, however, to remark, that these coverings are, in many cases, armour as well as clothing; intended for protection as well as warmth.

The *human* animal is the only one which is naked, and the only one which can clothe itself. This is one of the properties which renders him an animal of all climates, and of all seasons. He can adapt the warmth or lightness of his covering to the temperature of his habitation. Had he been born with a fleece upon his back, although he might have been comforted by its warmth in high latitudes, it would have oppressed him by its weight and heat, as the species spread towards the equator.

What art, however, does for men, nature has, in many instances, done for those animals which are incapable of art. Their clothing, of its own accord, changes with their necessities. This is particularly the case with that large tribe of quadrupeds, which are covered with *furs*. Every dealer in hare-skins and rabbit-skins knows how much the fur is thickened by the approach of winter. It seems to be a part of the same constitution and the same design, that wool, in hot countries, degenerates, as it is called, but in truth (most happily for the animal's ease) passes into hair; whilst, on the contrary, that hair, in the dogs of the polar regions, is turned into wool, or something very like it. To which may be referred, what naturalists have remarked, that bears, wolves, foxes, hares, which do not take the water, have the fur much thicker on the back than the belly; whereas in the beaver it is the thickest upon the belly; as are the feathers in water-fowl. We know the final cause of all this; and we know no other.

The *covering of birds* cannot escape the most vulgar observation. Its lightness, its smoothness, its warmth;—the disposition of the feathers all inclined backward, the down about their stem, the overlapping of their tips, their different configuration in different parts, not to mention the variety of their colours, constitute a vestment for the body, so beautiful, and so appropriate to the life which the animal is to lead, as that, I think, we should have had no conception of any thing equally perfect, if we had never seen it, or can now imagine any thing more so. Let us suppose (what is possible only in supposition) a person who had never seen a bird, to be presented with a plucked pheasant, and bid to set his wits to work, how to contrive for it a covering which shall unite the qualities of warmth, levity, and least resistance to the air, and the highest degree of each; giving it also as much of beauty and ornament as he could afford. He is the person to behold the work of the Deity, in this part of his creation, with the sentiments which are due to it.

The commendation, which the general aspect of the feathered world seldom fails of exciting, will be increased by farther examination. It is one of those cases in which the philosopher has more to admire than the common observer. Every *feather* is a mechanical wonder. If we look at the quill, we find properties not easily brought together—strength and lightness. I know few things more remarkable than the strength and lightness of the very pen with which I am writing. If we cast our eye to the upper part of the stem, we see a material, made for the purpose, used in no other class of animals, and in no other part of birds; tough, light, pliant, elastic. The pith, also, which feeds the feathers, is, amongst animal substances, *sui generis*; neither bone, flesh, membrane, nor tendon.*

But the artificial part of a feather is the *beard*, or, as it is sometimes, I believe, called, the vane. By the beards are meant, what are fastened on each side of the stem, and what constitute the breadth of the feather; what we usually strip off from one side or both, when we make a pen. The separate pieces or laminæ, of which the beard is composed are called threads, sometimes filaments, or rays. Now the first thing which an attentive observer will remark is, how much stronger the beard of the feather shows itself to be, when pressed in a direction perpendicular to its plane, than when rubbed, either up or down, in the line of the stem; and he will soon discover the structure which occasions this difference, viz., that the laminæ whereof these beards are composed are flat, and placed with their flat sides towards each other; by which means, whilst they *easily* bend for the approaching of each other, as any one may perceive by drawing his finger ever so lightly upwards, they are much harder to bend out of their plane, which is the direction in which they have to encounter the impulse and pressure of the air, and in which their strength is wanted, and put to the trial.

This is one particularity in the structure of a feather: a second is still more extraordinary. Whoever examines a feather, cannot help taking notice, that the threads or laminæ of which we have been speaking, in their natural state *unite*; that their union is something more than the mere apposition of loose surfaces; that they are not parted asunder without some degree of force; that nevertheless there is no glutinous cohesion between them; that, therefore, by some mechanical means or other, they catch or clasp among themselves, thereby giving to the beard or vane its closeness and compactness of texture. Nor is this all: when two laminæ, which have been separated by accident or force, are brought together again, they immediately *reclasp*; the connexion, whatever it was, is perfectly recovered, and the beard of the feather becomes as smooth and firm as if nothing had happened to it. Draw your finger down the feather, which is against the grain, and you break, probably, the junction of some of the contiguous threads;

*The quill part of a feather is composed of circular and longitudinal fibres. In making a pen, you must scrape off the coat of circular fibres, or the quill will split in a ragged, jagged manner, making what boys call cat's teeth.

draw your finger up the feather, and you restore all things to their former state. This is no common contrivance; and now for the mechanism by which it is effected. The threads or laminæ above mentioned are *interlaced* with one another; and the interlacing is performed by means of a vast number of fibres, or teeth, which the laminæ shoot forth *on each side*, and which hook and grapple together. A friend of mine counted fifty of these fibres in one-twentieth of an inch. These fibres are crooked; but curved after a different manner: for those which proceed from the thread on the side towards the extremity of the feather are longer, more flexible, and bent downward; whereas those which proceed from the side towards the beginning, or quill-end of the feather, are shorter, firmer, and turn upwards. The process then which takes place is as follows: when two laminæ are pressed together, so that these long fibres are forced far enough over the short ones, *their* crooked parts fall into the cavity made by the crooked parts of the others; just as the latch that is fastened to a door, enters into the cavity of the catch fixed to the door-post, and their hooking itself, *fastens* the door; for it is properly in this manner, that one thread of a feather is fastened to the other.

This admirable structure of the feather, which it is easy to see with the microscope, succeeds perfectly for the use to which nature has designed it; which use was, not only that the laminæ might be united, but that when one thread or lamina has been separated from another by some external violence, it might be reclasped with sufficient facility and expedition.*

In the *ostrich* this apparatus of crotchets and fibres, of hooks and teeth, is wanting; and we see the consequence of the want. The filaments hang loose and separate from one another, forming only a kind of down; which constitution of the feathers, however it may fit them for the flowing honours of a lady's head-dress, may be reckoned an imperfection in the bird, inasmuch as wings, composed of these feathers, although they may greatly assist it in running, do not serve for flight.

But under the present division of our subject, our business with feathers is, as they are the *covering* of the bird. And herein a singular circumstance occurs. In the small order of birds which winter with us, from a snipe downwards, let the external colour of the feathers be what it will, their Creator has universally given them a bed of *black* down next their bodies. Black, we know, is the warmest colour; and the purpose here is, to *keep in* the heat, arising from the heart and circulation of the blood. It is farther likewise remarkable, that this is not found in larger birds; for which there is also a reason:—small birds are much more exposed to the cold than large ones; forasmuch as they present, in proportion to their bulk, a much larger surface to the air. If a turkey were divided into a number of wrens (supposing the shape of the turkey and the wren to be similar), the surface of all the wrens would exceed the surface of the turkey, in

* The above account is taken from *Memoirs from a Natural History of Animals*, by the Royal Academy of Paris, published in 1701, p. 219.

the proportion of the length, breadth (or, of any homologous line), of a turkey to that of a wren ; which would be, perhaps, a proportion of ten to one. It was necessary therefore that small birds should be more warmly clad than large ones : and this seems to be the expedient by which that exigency is provided for.

II. In comparing different animals, I know no part of their structure which exhibits greater variety, or, in that variety, a nicer accommodation to their respective conveniency, than that which is seen in the different formations of their *mouths*. Whether the purpose be the reception of aliment merely, or the catching of prey, the picking up of seeds, the cropping of herbage, the extraction of juices, the suction of liquids, the breaking and grinding of food, the taste of that food, together with the respiration of air, and, in conjunction with it, the utterance of sound ; these various offices are assigned to this one part, and, in different species, provided for, as they are wanted, by its different constitution. In the human species, forasmuch as there are hands to convey the food to the mouth, the mouth is flat, and by reason of its flatness, fitted only for *reception* ; whereas the projecting jaws, the wide rictus, the pointed teeth of the dog and his affinities, enable them to apply their mouths to *snatch and seize* the objects of their pursuit. The full lips, the rough tongue, the corrugated cartilaginous palate, the broad cutting teeth of the ox, the deer, the horse, and the sheep, qualify this tribe for *browsing* upon their pasture ; either gathering large mouthfuls at once, where the grass is long, which is the case with the ox in particular ; or biting close where it is short, which the horse and the sheep are able to do, in a degree that one could hardly expect. The retired underjaw of a swine *works in the ground*, after the protruding snout, like a prong or plough-share, has made its way to the roots upon which it feeds. A conformation so happy was not the gift of chance.

In *birds*, this organ assumes a new character ; new both in substance and in form ; but in both, wonderfully adapted to the wants and uses of a distinct mode of existence. We have no longer the fleshy lips, the teeth of enamelled bone ; but we have, in the place of these two parts, and to perform the office of both, a hard substance (of the same nature with that which composes the nails, claws, and hoofs of quadrupeds), cut out into proper shapes, and mechanically suited to the actions which are wanted. The sharp edge and tempered point of the *sparrow's* bill picks almost every kind of seed from its concealment in the plant ; and not only so, but hulls the grain, breaks and shatters the coats of the seed, in order to get at the kernel. The hooked beak of the hawk-tribe separates the flesh from the bones of the animals which it feeds upon, almost with the cleanness and precision of a dissector's knife. The butcher-bird transfixes its prey upon the spike of a thorn, whilst it picks its bones. In some birds of this class, we have the *cross-bill*, *i. e.* both the upper and lower bill hooked, and their tips crossing. The *spoon-bill* enables the goose to graze, to collect its food from the bottom of pools, or to seek it amidst the soft or liquid substances with which it is mixed.

The *long* tapering bill of the snipe and woodcock penetrates still deeper into moist earth, which is the bed in which the food of that species is lodged. This is exactly the instrument which the animal wanted. It did not want strength in its bill, which was inconsistent with the slender form of the animal's neck, as well as unnecessary for the kind of aliment upon which it subsists; but it wanted length to reach its object.

But the species of bill which belongs to the birds that live by *suction*, deserves to be described in its relation to that office. They are what naturalists call serrated or dentated bills; the inside of them, towards the edge, being thickly set with parallel or concentric rows of short, strong, sharp-pointed prickles. These, though they should be called teeth, are not for the purpose of mastication, like the teeth of quadrupeds; nor yet, as in fish, for the seizing and retaining of their prey: but for a quite different use. They form a filtre. The *duck* by means of them discusses the mud: examining with great accuracy the puddle, the brake, every mixture which is likely to contain her food. The operation is thus carried on:—The liquid or semi-liquid substances, in which the animal has plunged her bill, she draws, by the action of her lungs, through the narrow interstices which lie between these teeth; catching, as the stream passes across her beak, whatever it may happen to bring along with it, that proves agreeable to her choice, and easily dismissing all the rest. Now, suppose the purpose to have been, out of a mass of confused and heterogeneous substances, to separate for the use of the animal, or rather to enable the animal to separate for its own, those few particles which suited its taste and digestion; what more artificial, or more commodious, instrument of selection, could have been given to it, than this natural filtre? It has been observed also (what must enable the bird to choose and distinguish with greater acuteness, as well, probably, as what greatly increases its luxury), that the bills of this species are furnished with large nerves,—that they are covered with a skin, and that the nerves run down to the very extremity. In the curlew, woodcock, and snipe, there are *three pairs* of nerves, equal almost to the optic nerve in thickness, which pass first along the roof of the mouth, and then along the upper chap down to the point of the bill, long as the bill is.

But to return to the train of our observations.—The similitude between the bills of birds and the mouths of quadrupeds is exactly such, as, for the sake of the argument, might be wished for. It is near enough to show the continuation of the same plan: it is remote enough to exclude the supposition of the difference being produced by action or use. A more prominent contour, or a wider gap, might be resolved into the effect of continued efforts, on the part of the species, to thrust out the mouth, or open it to the stretch. But by what course to action, or exercise, or endeavour, shall we get rid of the lips, the gums; the teeth; and acquire, in the place of them, pincers of horn? By what habit shall we so completely change, not only the shape of the part; but the substance of which it is composed? The truth is, if we had seen no other than the mouths of quadrupeds, we should have thought

no other could have been formed : little could we have supposed, that all the purposes of a mouth, furnished with lips, and armed with teeth, could be answered by an instrument which had none of these ; could be supplied, and that with many additional advantages, by the hardness, and sharpness, and figure of the bills of birds. Every thing about the animal *mouth* is mechanical. The teeth of fish have their points turned backward, like the teeth of a wool or cotton card. The teeth of lobsters work one against another, like the sides of a pair of shears. In many insects, the mouth is converted into a pump or sucker, fitted at the end sometimes with a wimble, sometimes with a forceps ; by which double provision, viz. of the tube and the penetrating form of the point, the insect first bores through the integuments of its prey, and then extracts the juices. And, what is most extraordinary of all, one sort of mouth, as the occasion requires, shall be changed into another sort. The caterpillar could not live without teeth ; in several species, the butterfly formed from it, could not use them. The old teeth therefore are cast off with the exuviae of the grub ; a new and totally different apparatus assumes their place in the fly. Amid these novelties of form, we sometimes forget that it is, all the while, the animal's *mouth* ; that, whether it be lips, or teeth, or bill, or beak, or shears, or pump, it is the same part diversified ; and it is also remarkable, that, under all the varieties of configuration with which we are acquainted, and which are very great, the organs of taste and smelling are situated near each other.

III. To the mouth adjoins the gullet ; in this part also, comparative anatomy discovers a difference of structure, adapted to the different necessities of the animal. In brutes, because the posture of their neck conduces little to the passage of the aliment, the fibres of the gullet, which act in this business, run in two close spirallines, crossing each other : in men, these fibres run only a little obliquely from the upper end of the œsophagus to the stomach, into which, by a gentle contraction, they easily transmit the descending morsels ; that is to say, for the more laborious deglutition of animals, which thrust their food *up* instead of *down*, and also through a longer passage, a proportionably more powerful apparatus of muscles is provided ; more powerful, not merely by the strength of the fibres, which might be attributed to the greater exercise of their force, but in their collocation, which is a determinate circumstance, and must have been original.

IV. The gullet leads to the *intestines* : here, likewise, as before, comparing quadrupeds with man, under a general similitude we meet with appropriate differences. The *valvulae conniventes*, or, as they are by some called, the semilunar valves, found in the human intestine, are wanting in that of brutes. These are wrinkles or plates of the innermost coat of the guts, the effect of which is to retard the progress of the food through the alimentary canal. It is easy to understand how much more necessary such a provision may be to the body of an animal of an erect posture, and in which, consequently, the weight of the food is added to the action of the intestine, than in that of a quadruped, in which the course of the food,

from its entrance to its exit, is nearly horizontal: but it is impossible to assign any cause, except the final cause, for this distinction actually taking place. So far as depends upon the action of the part, this structure was more to be expected in a quadruped than in a man. In truth, it must in both have been formed, not by action, but in direct opposition to action and to pressure; but the opposition which would arise from pressure, is greater in the upright trunk than in any other. That theory therefore is pointedly contradicted by the example before us. The structure is found where its generation, according to the method by which the theorist would have it generated, is the most difficult; but (*observed*) it is found where its effect is most useful.

The different length of the intestines in carnivorous and herbivorous animals, has been noticed on a former occasion. The shortest, I believe, is that of some birds of prey, in which the intestinal canal is little more than a straight passage from the mouth to the vent. The longest is in the deer-kind. The intestines of a Canadian stag, four feet high, measured ninety-six feet.* The intestine of a sheep, unravelled, measured thirty times the length of the body. The intestine of a wild cat is only three times the length of the body. Universally, where the substance upon which the animal feeds is of slow concoction, or yields its chyle with more difficulty, there the passage is circuitous and dilatory, that time and space may be allowed for the change and the absorption which are necessary. Where the food is soon dissolved, or already half assimilated, an unnecessary, or, perhaps, hurtful detention is avoided, by giving to it a shorter and a readier route.

V In comparing the *bones* of different animals, we are struck, in the bones of birds, with a *propriety*, which could only proceed from the wisdom of an intelligent and designing Creator. In the bones of an animal which is to fly, the two qualities required are strength and lightness. Wherein, therefore, do the bones of birds (I speak of the cylindrical bones) differ, in these respects, from the bones of quadrupeds? In three properties: first, their cavities are much larger in proportion to the weight of the bone, than in those of quadrupeds; secondly, these cavities are empty; thirdly, the shell is of a firmer texture than is the substance of other bones. It is easy to observe these particulars, even in picking the wing or leg of a chicken. Now, the weight being the same, the diameter, it is evident, will be greater in a hollow bone than in a solid one, and with the diameter, as every mathematician can prove, is increased, *cæteris paribus*, the strength of the cylinder, or its resistance to breaking. In a word, a bone of the *same weight* would not have been so strong in any other form; and to have made it heavier, would have incommoded the animal's flight. Yet this form could not be acquired by use, or the bone become hollow or tubular by exercise. What appetency could excavate a bone?

* Mem. Acad. Paris, 1701; p. 170.

VI. The *lungs* also of birds, as compared with the lungs of quadrupeds, contain in them a provision, distinguishingly calculated for this same purpose of levitation; namely, a communication (not found in other kinds of animals) between the air-vessels of the lungs and the cavities of the body: so that by the intromission of air from one to the other (at the will, as it should seem, of the animal), its body can be occasionally puffed out, and its tendency to descend in the air, or its specific gravity, made less. The bodies of birds are blown up from their lungs (which no other animal bodies are), and thus rendered buoyant.

VII. All birds are *oviparous*. This likewise carries on the work of gestation with as little increase as possible of the weight of the body. A gravid uterus would have been a troublesome burden to a bird in its flight. The advantage, in this respect, of an oviparous procreation, is, that, whilst the whole brood are hatched together, the eggs are excluded singly, and at considerable intervals. Ten, fifteen, or twenty young birds may be produced in one cleft or covey, yet the parent bird have never been encumbered by the load of more than one full-grown egg at one time.

VIII. A principal topic of comparison between animals, is in their *instruments of motion*. These come before us under three divisions; feet, wings, and fins. I desire any man to say, which of the three is best fitted for its use; or whether the same consummate art be not conspicuous in them all. The constitution of the elements, in which the motion is to be performed, is very different. The animal action must necessarily follow that constitution. The Creator therefore, if we might so speak, had to prepare for different situations, for different difficulties; yet the purpose is accomplished not less successfully in one case than in the other. And, as between *wings* and the corresponding limbs of quadrupeds, it is accomplished without deserting the general idea. The idea is modified, not deserted. Strip a wing of its feathers, and it bears no obscure resemblance to the fore-leg of a quadruped. The articulations at the shoulder and the cubitus are much alike; and, what is a closer circumstance, in both cases the upper part of the limb consists of a single bone, the lower part of two.

But, fitted up with its furniture of feathers and quills, it becomes a wonderful instrument, more artificial than its first appearance indicates, though that be very striking: at least, the use, which the bird makes of its wings in flying, is more complicated, and more curious, than is generally known. One thing is certain, that if the flapping of the wings in flight were no more than the reciprocal motion of the same surface in opposite directions, either upwards and downwards, or estimated in any oblique line, the bird would lose as much by one motion, as she gained by another. The skylark could never ascend by such an action as this: for, though the stroke upon the air by the under-side of her wing would carry her up, the stroke from the upper-side, when she raised her wing again, would bring her down. In order, therefore, to account for the advantage which the bird derives from her wing, it is necessary to suppose, that the surface of the wing, measured upon the same plane, is contracted, whilst the wing

is drawn up; and let out to its full expansion, when it descends upon the air for the purpose of moving the body by the reaction of that element. Now the form and structure of the wing, its external convexity, the disposition, and particularly the overlapping, of its larger feathers, the action of the muscles, and joints of the pinions, are all adapted to this alternate adjustment of its shape and dimensions. Such a twist, for instance, or semirotatory motion, is given to the great feathers of the wing, that they strike the air with their flat side, but rise from the stroke slantwise. The turning of the oar in rowing, whilst the rower advances his hand for a new stroke, is a similar operation to that of the feather, and takes its name from the resemblance. I believe that this faculty is not found in the great feathers of the tail. This is the place also for observing, that the pinions are so set upon the body, as to bring down the wings not vertically, but in a direction obliquely tending towards the tail; which motion, by virtue of the common resolution of forces, does two things at the same time; supports the body in the air, and carries it forward. The *steerage* of a bird in its flight is effected partly by the wings, but in a principal degree by the tail. And herein we meet with a circumstance not a little remarkable. Birds with long legs have short tails; and, in their flight, place their legs close to their bodies, at the same time stretching them out backwards, as far as they can. In this position, the legs extend beyond the rump, and become the rudder; supplying that steerage which the tail could not.

From the *wings* of birds, the transition is easy to the *fins* of fish. They are both, to their respective tribes, the instruments of their motion; but, in the work which they have to do, there is a considerable difference, founded in this circumstance. Fish, unlike birds, have very nearly the same specific gravity with the element in which they move. In the case of fish, therefore, there is little or no weight to bear up; what is wanted, is only an impulse sufficient to carry the body through a resisting medium, or to maintain the posture, or to support or restore the balance of the body, which is always the most unsteady where there is no weight to sink it. For these offices, the fins are as large as necessary, though much smaller than wings, their action mechanical, their position, and the muscles by which they are moved, in the highest degree convenient. The following short account of some experiments upon fish, made for the purpose of ascertaining the use of their fins, will be the best confirmation of what we assert. In most fish, beside the great fin the tail, we find two pairs of fins upon the sides, two single fins upon the back, and one upon the belly, or rather between the belly and the tail. The *balancing* use of these organs is proved in this manner. Of the large-headed fish, if you cut off the pectoral fins, *i. e.* the pair which lies close behind the gills, the head falls prone to the bottom: if the right pectoral fin only be cut off, the fish leans to that side; if the ventral fin on the same side be cut away, then it loses its equilibrium entirely; if the dorsal and ventral fins be cut off, the fish reels to the right and left. When the fish dies, that is, when the fins cease to play, the belly turns upwards. The use of the same parts for *motion* is seen in the following

observation upon them when put in action. The pectoral, and more particularly the ventral fins, serve to *raise and depress* the fish; when the fish desires to have a *retrograde* motion, a stroke forward with the pectoral fin effectually produces it; if the fish desire to *turn* either way, a single blow with the tail the opposite way sends it round at once: if the tail strike both ways, the motion produced by the double lash is *progressive*, and enables the fish to dart forwards with an astonishing velocity.* The result is, not only, in some cases, the most rapid, but, in all cases, the most gentle, pliant, easy, animal motion, with which we are acquainted. However, when the tail is cut off, the fish loses all motion, and gives itself up to where the water impels it. The rest of the fins, therefore, so as respects motion, seem to be merely subsidiary to this. In their mechanical use, the anal fin may be reckoned the keel; the ventral fins, out-riggers; the pectoral muscles, the oars; and if there be any similitude between these parts of a boat and a fish, observe, that it is not the resemblance of imitation, but the likeness which arises from applying similar mechanical means to the same purpose.

We have seen that the *tail* in the fish is the great instrument of motion. Now, in cetaceous or warm-blooded fish, which are obliged to rise every two or three minutes to the surface to take breath, the tail, unlike what it is in other fish, is horizontal; its stroke, consequently, perpendicular to the horizon, which is the right direction for sending the fish to the top, or carrying it down to the bottom.

Regarding animals in their instruments of motion, we have only followed the comparison through the first great division of animals into beasts, birds, and fish. If it were our intention to pursue the consideration farther, I should take in that generic distinction amongst birds, the *web-foot* of water-fowl. It is an instance which may be pointed out to a child. The utility of the web to water-fowl, the inutility to land-fowl, are so obvious, that it seems impossible to notice the difference without acknowledging the design. I am at a loss to know, how those, who deny the agency of an intelligent Creator, dispose of this example. There is nothing in the action of swimming, as carried on by a bird upon the surface of the water, that should generate a membrane between the toes. As to that membrane, it is an exercise of constant resistance. The only supposition I can think of is, that all birds have been originally water-fowl, and web-footed; that sparrows, hawks, linnets, &c. which frequent the land, have, in process of time, and in the course of many generations, had this part worn away by treading upon hard ground. To such evasive assumptions must atheism always have recourse! and, after all, it confesses that the structure of the feet of birds, in their original form, was critically adapted to their original destination! The web-feet of amphibious quadrupeds, seals, otters, &c. fall under the same observation.

IX. The *five senses* are common to most large animals; nor have we much difference to remark in their constitution, or much, however, which is referable to mechanism.

* Goldsmith, Hist. of An. Nat. Vol. vi. p. 154.

The superior sagacity of animals which hunt their prey, and which, consequently, depend for their livelihood upon their *nose*, is well known in its use; but not at all known in the organisation which produces it.

The external *ears* of beasts of prey, of lions, tigers, wolves, have their trumpet-part, or concavity, standing forwards, to seize the sound which are before them, viz. the sounds of the animals which they pursue or watch. The ears of animals of flight are turned backward, to give notice of the approach of their enemy from behind, whence he may steal upon them unseen. This is a critical distinction, and is mechanical; but it may be suggested, and, I think, not without probability, that it is the effect of continual habit.

The *eyes* of animals which follow their prey by night, as cats, owls, &c. possess a faculty not given to those of other species, namely, of closing the pupil *entirely*. The final cause of which seems to be this:—It was necessary for such animals to be able to descry objects with very small degrees of light. This capacity depended upon the superior sensibility of the retina; that is, upon its being affected by the most feeble impulses. But that tenderness of structure, which rendered the membrane thus exquisitely sensible, rendered it also liable to be offended by the access of stronger degrees of light. The contractile range therefore of the pupil is increased in these animals, so as to enable them to close the aperture entirely, which includes the power of diminishing it in every degree; whereby at all times such portions, and only such portions, of light are admitted, as may be received without injury to the sense.

There appears to be also in the figure, and in some properties of the pupil of the eye, an appropriate relation to the wants of different animals. In horses, oxen, goats, sheep, the pupil of the eye is elliptical; the transverse axis being horizontal; by which structure, although the eye be placed on the side of the head, the anterior elongation of the pupil catches the forward rays, or those which come from objects immediately in front of the animal's face.

OBJECT OF STUDY.

(From the Student's Manual, by the Rev. John Todd.)

THE human mind is the brightest display of the power and skill of the Infinite mind, with which we are acquainted. It is created and placed in this world to be educated for a higher state of existence. Here its faculties begin to unfold, and those mighty energies, which are to bear it forward to unending ages, begin to discover themselves. The *object* of training such a mind should be, to enable the soul to fulfil her duties well here, and to stand on high vantage-ground, when she leaves this cradle of her being, for an eternal existence beyond the grave.

There is now and then a youth, who, like Ferguson, can tend sheep in the field, and there accurately mark the position of the stars, with a thread and beads, and with his knife construct a watch from wood; but such instances are rare. Most need encouragement to sustain, instruction to aid, and directions to guide them. Few, probably, ever accomplish anything-like as much as they expected or ought; and I have thought that one reason is, that students waste a vast amount of time in acquiring that experience which they need.

The reader will please to bear in mind, that the only object I have in view, is to be useful to him—to throw out such hints and cautions, and to give such specific directions, as will aid him to become all that the fond hopes of his friends anticipate, and all that his own heart ought to desire.

I would here say to the student, that the character which he now forms and sustains, will cling to him through life. Young men always receive impressions concerning each other which nothing can ever efface. The very nicknames which are given at this period, and which are generally indicative of some peculiar trait of character, will never be forgotten. His moral and intellectual character, while young, is that by which his class-mates, especially, will invariably measure him through life. Is he unamiable, now, or indolent now, or vicious now? depend upon it, his character is stamped, and no subsequent years of good nature, or of application, or of moral worth, can ever do away the impressions which he is now making. Ask any educated man about the character of his fellow, and you will notice, that he at once goes back to his college life, and dates and judges from that period. Thus, every anecdote, every ludicrous circumstance, whether it was a mistake in reciting, or in judgment, or in moral conduct, will be repeated over the land, and his frailties will be known as widely as his class is scattered.

No mistake can be more decided than that of supposing that you are now retired from the world, have no character to maintain, and no responsibility resting upon you. It is far otherwise. And it is peculiarly trying, that, during the very period when the character is forming, it is viewed by all around you as if it were already and unalterably formed, and judged of accordingly. He who now sits by your side in the lecture-room, has every trait of your character exposed to his view; and he will remember every trait, and he will mark you through life, at the place where you now stand. Never, in fact, does so great a responsibility rest upon you, as while a student; because you are now forming your character and habits, and setting your standard; and, because, also, your contemporaries will seldom, if ever, alter their judgment concerning you. If you are stupid and inaccurate during this period, though you should hereafter write dictionaries, and edit classics, and dream in foreign languages, I very much doubt whether your friend, now at your elbow, would ever give you credit for anything higher than dulness.

Doubtless, multitudes are now in the process of education, who *will* never reach any tolerable standard of excellence. Probably some never could; but in most cases they might. The exceptions are few; and probably most, who read these pages, do feel a desire, more or less strong, of fitting themselves for respectability and usefulness. They are, however, ignorant of the way; they are surrounded by temptations and dangers; they soon forget the encouragements, and oscillate between hope and fear, resolution and discouragement. It is for such that I write.

"When I turned in at night, the sea was smooth and bright as a mirror; the vast firmament seemed to descend below us; the ship appeared to be suspended in the centre of an immense sphere, and, if I may say so, one felt, in awe and silence, the majesty of space. The sails hung idly by the mast, and the officers' tread along the deck was the only sound heard. So I left them.

"About midnight, I was awakened by a heavy swing of my cot, succeeded by a sudden dash to the other side: the water was pouring into our room, and I could hear its rush across the upper decks, where all was noise and rapid motion. I hurried on my clothes, and ran up; the gun-deck was clear: hammocks had already been lashed up and stowed; it was lighted up, and showed it flooded in its whole extent. I ascended to the next: the rain came down in torrents, but I did not feel it, so deeply absorbing was the scene. I wish I could describe it. The sky was in a constant blaze; the sea was not high but broken, confused, and foaming, and taking from the lightning an unnatural hue. Above me were the yards covered with human beings, thrown by each flash into strong outline, struggling hard to secure the canvass and to maintain their precarious footing. The ship rolled tremendously. And now add the wild uproar of the elements, 'the noise of many waters,' the deep and constant roar of the winds, the cries of the men aloft, the heavy and rapid tread of those below, the reiterated commands of officers, and, rising

above all this, the firm and composed orders of the trumpet, and then add to this the heavy, rolling thunder, at times drowning all these sounds. The first-lieutenant had the deck: he had sprung to it at the first alarm, and, seizing the trumpet, had called 'Black,' his favourite helmsman. The ship was soon under snug sail, and now dashed onward at a furious rate, giving to the gale a yet wilder character.

"All at once a rocky island seemed to start up from the water; but the next broad flash showed a good offing, and we were safe; when suddenly came a loud shout from the forecastle—'A sail close on the larboard bow, sir.' I trembled then—not for ourselves, for we should have gone over them, and have scarcely felt the shock—but for the poor wretches whom it would have been impossible to save. The helm was put hard down: we shot by, and I again breathed freely, when some one bade me look up to our spars. I did so, and found every upper yard-arm and mast tipped with lightning. Each blaze was twice as large as that of a candle; and thus we flew on, with the elements of destruction playing above our heads."

Can any one read this beautiful description of one of our own proud ships in a storm, and fail to reflect, that *discipline* is the life and salvation of such a ship in such a storm? But I have copied it for a different purpose; and that is, to call the attention of the reader a single moment to the "helmsman Black." Can there be a doubt but the sailor who could take the helm in these circumstances, and hold the ship firmly on her course amid the storm, shunning rocks, and just shooting by smaller vessels, must have courage, presence of mind, and great promptness of character? Or can there be a doubt, but, if he had been properly *educated* when young, he might have stood in the lieutenant's place, and held the trumpet, or even commanded the ship? It is my earnest wish to aid such as have capacity, in seizing the present moment, and, while they have the opportunity, in so laying their plans, and in so forming their habits, as to make the most of all their endowments. There are, doubtless, some who will read these pages without benefit. May I suggest a possible reason? "A mole, having consulted many oculists for the benefit of his sight, was at last provided with a good pair of spectacles; but, upon his endeavouring to make use of them, his mother told him, that, though they might help the eye of a *man*, they could be of no use to a *mole*."

You may converse with any man, however distinguished for attainments or habits of application, or power of using what he knows, and he will sigh over the remembrance of the past, and tell you, that there have been many fragments of time which he has wasted, and many opportunities which he has lost for ever. If he had only seized upon the fleeting advantages, and gathered up the fragments of time, he might have pushed his researches out into new fields, and, like the immortal Bacon, have amassed vast stores of knowledge. The mighty minds which have gone before us, have left treasures for our inheritance, and the choicest gold is to be had for the digging. How great the dissimilarity between a naked Indian, dancing with joy over a new feather for his head-dress, and such a mind as

that of Newton or of Boyle! And what makes the difference? There is mind enough in the savage; he can almost outdo the instincts of the prey which he hunts; but his soul is like the marble pillar. There is a beautiful statue in it, but the hand of the sculptor has never laid the chisel upon it. The mind of the savage has never been disciplined by study; and it, therefore, in the comparison, appears like the rough bison of the forest, distinguished only for strength and ferocity.

I am not now going to discuss the question whether the souls of men are naturally equal. If they are, it is certain that, though the fact were proved, it would be of little practical use, since the organisation of bodies is so different, that no training can make them alike. But this, I think, may safely be affirmed, that every one has naturally the power of excelling in some one thing. You may not excel in mathematics, or as a writer, or a speaker; but I honestly believe that every one of my readers is capable of excelling in some department, and will surely do so, if faithful to himself.

I once saw a little boy, on a public occasion, while thousands were gazing at him with unaffected astonishment, climb the lightning-rod on the lofty spire of a meeting-house. The wind blew high, and the rod shook and trembled; but up he went, till he had reached the vane, 195 feet high. All, every moment, expected to see him fall. But what was our amazement to see him mount the vane, and place his little feet upon it, throwing his arms aloft in the air, and turning round, as the wind turned his shaking foothold! He stood there till weary, and came down at his leisure. Here was a mind capable, I doubt not, of high enterprise. And yet he has never been heard of since. And why not? Either his mind has not been cultivated, or else his genius has been bent out of its proper channel. I will just add, that the poor boy was fined for setting so dangerous an example before the boys who saw him; but I could not help wishing that, while they sought to restrain him from such physical daring, they had been as careful to direct his fearless genius in a proper channel.

I perceive I have used a dangerous word, though of great antiquity. The word is *genius*. Many train themselves into habits of eccentricity and oddity, and suppose these inseparable from genius. There are some men who think nothing so characteristic of genius, as to do common things in an uncommon way.

Dean Swift, in his celebrated *Travels*, found whole nations of these geniuses, and tells us that he observed a tailor, with a customer before him, whose measure for a coat he was taking with a quadrant! Never set up any pretensions for a genius, nor lay claim to the character. But few such are born into the world; and of those few, though envied greatly, and imitated as greatly, but very few, indeed, leave the world wiser or better than they found it. The object of hard study is not to draw out geniuses, but to take minds, such as are formed in a common mould, and fit them for active and decisive usefulness. Nothing is so much coveted by a young man as the reputation of being a genius; and many seem to feel that the want of patience for laborious

application and deep research, is such a mark of genius as cannot be mistaken: while a real genius, like Sir Isaac Newton, with great modesty, says, that the great and only difference between his mind and the minds of others, consisted solely in his having more patience. You may have a good mind, a sound judgment, or a vivid imagination, or a wide reach of thought and of views; but, believe me, you probably are not a genius, and can never become distinguished without severe application. Hence, all that you ever have must be the result of labour—hard, untiring labour. You have friends to cheer you on; you have books and teachers to aid you, and multitudes of helps. But, after all, disciplining and educating your mind must be *your own* work. No one can do this but yourself; and nothing in this world is of any worth, which has not labour and toil as its price. The zephyrs of summer can but seldom breathe around you. “I foresee, distinctly, that you will have to double Cape Horn in the winter season, and to grapple with the gigantic spirit of the storm which guards the cape; and I foresee, as distinctly, that it will depend entirely on your own skill and energy, whether you survive the fearful encounter, and live to make a port in the mild latitudes of the Pacific.”*

Johnson asserts that, if any one would be master of the English language, he must give his days and nights to the reading of Addison. It is still more emphatically true, that, if any one would be distinguished, he *must* labour for it. There is no real excellence without patient study. Those who have now and then risen upon the world, without education, and without study, have shed but a doubtful light, and that but for a moment. Many a youth has kindled at the story of TOMASO ANELLO, who was one day hawking fish through the streets of Naples, and the next was master of armies and fleets, and made his will the rule for an empire. The army obeyed him; the banditti quailed before him; and never was a man more absolute in his will. But his short reign of nine days was marked with great folly, cruelty, and despotism; and such examples must ever stand before the world as among the possible things; but also among the improbable, and still more undesirable.

Set it down as a fact, to which there are no exceptions, that we must labour for all that we have, and that nothing is worth possessing or offering to others, which costs us nothing.

Those islands which so beautifully adorn the Pacific, and which, but for sin, would seem so many Edens, were reared up from the bed of the ocean by the little coral insect, which deposits one grain of sand at a time, till the whole of these piles are reared up. Just so with human exertions. The greatest results of the mind are produced by small, but continued efforts. I have frequently thought of the motto of one of the most distinguished scholars in this country, as peculiarly appropriate. As near as I remember, it is the picture of a mountain, with a man at its base, with his hat and coat lying beside him, and a pickaxe in his hand; and as he digs, stroke by stroke, his patient look corresponds with his words—“Little by little.”

* Wirt.

The first and great object of education is, to discipline the mind. It is naturally, like the colt, wild and ungoverned. Let any man, who has not subdued his mind, more or less, by close thought, sit down and take hold of a subject, and try to "think it out." The result will be, that he cannot hold his thoughts upon the point. They fly off—they wander away. He brings them back, and determines now to hold his attention there; when, at once, ere he knows how, he again finds himself away. The process is repeated, till he gives it up in discouragement, or else goes to sleep. I once heard a young man complaining that he could not keep his mind fixed on a point. "It rolled off like a barrel from a pin;" and he gave some hints that possibly it might be, that his mind was so *great*! His gravity altogether exceeded that of his associates, to whom he was giving the explanation. How many great minds would there be, if such indications were to be relied on!

In the period which belongs to you as a *student*, then, it is not important that you should try to lay up a vast amount of information. Rather retain what you do read. The object now is, to fit the mind for future acquisitions, and future usefulness. The magazine will be filled soon enough; and we need not be too anxious to fill it while we are getting it ready for use. I am desirous that you have it strongly impressed on the memory, that the great object now is, to set the mind out on a course which she can successfully pursue herself, and that, too, through life.

You must calculate to improve through life; and, therefore, now try to form habits of study, and learn how to study to advantage. "Newton was in his eighty-fifth year improving his Chronology; and Waller, at eighty-two, is thought to have lost none of his poetical fire."

Make it the first object to be able to fix and hold your attention upon your studies. He who can do this has mastered many and great difficulties; and he who cannot do it, will in vain look for success in any department of study. "To effect any purpose in study, the mind must be concentrated. If any other object plays on the fancy than that which ought to be exclusively before it, the mind is divided, and both are neutralized, so as to lose their effect—just as when I learned two systems of shorthand: I was familiar with Gurney's method, and wrote it with ease; but when I took it into my head to learn Byrom's, they destroyed each other, and I could write neither." What is commonly called *abstraction in study*, is nothing more than having the attention so completely occupied with the subject in hand, that the mind takes notice of nothing without itself. One of the greatest minds which this or any other country, ever produced, has been known to be so engrossed in thinking on a particular subject, that his horse has waded through the corner of a pond, yet, though the water covered the saddle, he was wholly insensible to the cause of his being wet. I mention this, not to recommend such an abstraction, but to show, that he who has his attention fixed, and the power of fixing it when he pleases, will be successful in study. Need I say here, that you can never command the attention, if you are in the habit of yielding to your appetites and passions? "No one," says one who knew,

“whose appetites are his masters, can perform the duties of his nature with strictness and regularity. He that would be superior to external influence, must first become superior to his own passions.” Why does the boy, who has a large sum upon his slate, scowl, and rub out, and begin again, and grow discouraged? Because he has not yet learned to command his attention. He was going on well, when some new thought flashed into his mind, or some new object caught his eye, and he lost the train of calculation. Why has that Latin or Greek word so puzzled you to remember, that you have had to look it out in your dictionary some ten or dozen times? And why do you now look at it as at a stranger! whose name you *ought* to know, but which you cannot recal? Because you have not yet acquired fully the power of fixing your attention. That word would have been remembered long since, if it had not passed as a shadow before your mind when you looked at it. A celebrated authoress, who states that she reserves all her i’s to be dotted, and her t’s to be crossed, on some sick day, might have given a more philosophical reason; and that is, that she could not bear to have her attention interrupted a single moment when writing with the most success.

The difficulty of confining the attention is probably the secret of the plan of Demosthenes, who shut himself up in his celebrated dark cave for study; and this will account for the fact, that a person who is unexpectedly deprived of the use of his eyes, will not unfrequently make advances in thought, and show a strength of mind, unknown before. I have frequently seen boys take their books on a summer’s day, and flee from their room to the grove, and from the grove back again, full of uneasiness, and in vain hoping that changing the place would give them some new power over the roving attention, and that indescribable restlessness, so inseparable from the early efforts to subdue the mind. It is all in vain. You cannot fly from yourself; and the best way is to sit directly down in your room, and there command your attention to fix itself upon the hard, dry lesson, and master it; and, when you have thus brought this rover to obey you once, he will be more ready to obey the next time. Attention will more readily come at your call to-morrow than to-day.

Patience is a virtue kindred to attention; and without it, the mind cannot be said to be disciplined. Patient labour and investigation are not only essential to success in study, but are an unfailing guarantee to success. The young man is in danger of feeling “that he will strike out something new. His spirits are buoyant, and his hopes sanguine.” He knows not the mortified feeling of being repeatedly defeated by himself. He will burst upon the world at once, and strike the blows of a giant, while his arm is that of a child. He is not to coil up the hill, and wait for years of self-discipline, close, patient study and hard labour—not he; but before you know it, he will be on heights of the highest Alps, with a lofty feeling, looking down upon the creepers below. Hence, multitudes waste life, and absolutely fritter away their existence, in doing nothing, except waiting for a golden opportunity to do something great and magnificent. The tree must not be

allowed to grow by inches; no, at once the sapling must be loaded with the fruit of the tree of threescore years. Alas! trees planted and watered by such expectations will never be more than dwarfs. Franklin rose high, and his name is engraven deep and fair on the roll of immortality; but he began his greatness by making an almanac: he continued to make it for years, and rose, step by step, still he was acknowledged at the head of modern philosophers. Every young man ought to remember, that he who would carry the ox, must every day shoulder the calf. That great man, who returned to his study, and, finding that his little dog had turned over the table, and burned up the papers on which he had been engaged for years, yet calmly said, "you have done me a great mischief, Diamond," showed a soul truly great; and its greatness, in this instance, consisted in his patience. Without a murmur, he sat down and began to do over the same great labour. He lived to complete it; and it was the admiration of the learned world. Yet how few have the patience thus to sit down and labour day by day for years. It is neither a small nor an easy part of education to cultivate this trait of character.

The student should learn to think and act for himself. True originality consists in doing things well, and doing them in your own way. A mind half educated is generally imitating others. "No man was ever great by imitation." One great reason is, that it is so much easier to copy the defects and the objectionable parts of a great man's character, than to imitate his excellencies, that we gain only the former. Alexander the Great had a foolish tutor, who used to call him Achilles. He was taught to admire that character. But when he came to imitate Achilles, what did he do? He imitated one of the most cruel and detestable actions in that hero's life. He dragged the governor of a town through the streets after his chariot. This was because the foolish teacher, Lysimachus, taught him to imitate as well as admire. It has been more than strongly conjectured that France murdered her king, the inoffensive and amiable Louis XVI., because England once beheaded a king! Strange, that even nations cannot become imitators without copying that which is atrocious! Not a few waste their lives and lose all discipline and improvement, by an insensible and unconscious habit of imitating others. Of the multitudes who imitated Johnson, was there one who had anything more than his pompous, inflated language? They seemed to feel that they were wielding the club of Hercules; but the club, in every instance, was hollow, and the blow resulted in nothing but sound. Of the many who tried to follow in the wake of Byron, is there one who will live in song? Not one. They could copy nothing but his measure and his wickedness, borrowing his villainess without his genius. The lion himself is fast turning to corruption, but no honey will be found in the carcass; and as for his followers, the world was relieved from their curse by their decaying before they could taint the moral atmosphere. It is vastly more easy to imitate and borrow, both matter and manner, than to have them of your own.

But set it down, that no imitator ever reached anything like eminence. You must have a character of your own, and rules by which that character is regulated. It has been said of Franklin, that he was a philosopher, because, in his childhood, he formed those rules which regulated him even in old age. "My father," says Andrew Fuller, "was a farmer; and, in my younger days, it was a great boast among the ploughmen that they could plough a straight line *across* the furrows or ridges of the field. I thought I could do this as well as any of them. One day I saw such a line, which had just been drawn, and I thought, 'Now I have it.' Accordingly I laid hold of the plough, and putting one of the horses into the furrow which had just been made, I resolved to keep him walking in it, and thus secure a parallel line. By and by, however, I observed that there were what might be termed *wiggles* in this furrow; and when I came to them, they turned out to be *larger* in *mine* than in the original. On perceiving this, I threw the plough aside, and determined *never* to be an imitator." Let it be remembered that we cannot copy greatness or goodness by any effort. We must acquire it by our own patience and diligence.

Another object of study is to *form the judgment*, so that the mind can not only investigate, but weigh and balance opinion and theories. Without this you will never be able to decide what to read or to throw aside; what author to distrust, or what opinions to receive. Some of the most laborious men and diligent readers, pass through life without accomplishing anything desirable, for the want of what may be called a *well-balanced judgment*. The last theory which they hear is the true one, however deficient as to proof from facts; the last book they read is the most wonderful, though it may be worthless: the last acquaintance is the most valuable, because least is known about him. Hence multitudes of objects are pursued, which have no use in practical life; and there is a laborious trifling—which unfits the mind for anything valuable. It leads to a wide field, which is barren and waste. "I once saw a shepherd," says an Italian author, "who used to divert himself," in his solitudes, with tossing up eggs and catching them again without breaking them; in which he had arrived to so great a degree of perfection, that he would keep up *four* at a time for several minutes together, playing in the air, and falling into his hand by turns. I think I never saw greater severity than in this man's face; for, by his wonderful perseverance and application, he had contracted the seriousness and gravity of a privy-counsellor; and I could not but reflect with myself, that the same assiduity and attention, had they been rightly applied, might have made him a greater mathematician than Archimedes.

I have known a boy—and such cases are not rare—spend time enough in learning to read with the book bottom upwards—which he did with great fluency—to have made him acquainted with all the minutiae of the Latin grammar. This is not merely time wasted, but it is cultivating a taste for out-of-the-way things and useless acquisitions. It is no small part of education and of study, to know what you do, and what you do not wish to know.

If, by anything I have said, an impression has been made that I do not deem it necessary for a man to be familiar with a wide circle of knowledge, in order to become known, influential, and useful, I trust such an impression will be corrected before the reader closes this book. What I wish to say here is, that the great object of the student is, to prepare his mind to use materials which may hereafter be gathered; but not now to gather them. One of the most distinguished men of this age and nation, whose voice has been heard in lands distant from ours, is said to be remarkable for this faculty—that, when he wants information on any subject, he seems to know, intuitively, who and what shall be laid under immediate tribute. He does not pore over all that this or that man has written, but gets light from all quarters, and then, like the burning-glass, condenses and brings to a focus all the light and heat which are necessary to consume obstacles and objections. Such a habit is worth all the scraps of learning and information which could be laid up in a mind which knows of no use in knowledge but the pleasure which it affords while in the act of acquiring.

The great instrument of affecting the world is the mind; and no instrument is so decidedly and continually improved by exercise and use as the mind. Many seem to feel as if it were not safe to put forth all their powers at one effort. You must reserve your strength for great occasions, just as you would use your horse, moderately and carefully on common occasions, but give him the spur on occasions of great emergency. This might be well, were the mind, in any respect, like the bones and muscles of the horse. Some, when they are contriving to see how little mental effort will answer, and how far and wide a few feeble thoughts may be spread, seem more like students than at any other time, as if it were dangerous to task the mind too often, lest her stores be exhausted, or her faculties become weakened. The bow may be but half bent, lest it be overstrained, and lose its power. You may call upon your mind to-day for its highest efforts, and stretch it to the utmost in your power, and you have done yourself a kindness. The mind will be all the better for it. To-morrow you may do it again; and each time it will answer more readily to your calls.

But remember, that real discipline of mind does not so much consist in now and then making a great effort, as in having the mind so trained that it will make constant efforts. If you would have the discipline anything like perfect, it must be unremitted: the mind must be kept clear and shrewd.

The perfection of a disciplined mind is, not to be able, on some great contingency, to rouse up its faculties, and to draw out a giant strength, but to have it always ready to produce a given and an equal quantity of results in a given and equal time. This was the glory of the mind of Isaac Newton. He who trains his mind to go by impulses, and must wait for them, will accomplish but very little during his life.

Two monks live near each other at the same time. They both profess to be students; only one, however, does anything towards disci

plining his mind. One uses language and lamentations as follows:—
 “They have invented a new language, which they call Greek; you must be carefully on your guard against it; it is the matter of all heresy. I observe in the hands of many persons a book written in that language, and which they call the New Testament. It is a book full of daggers and poison. As to the Hebrew, my dear brethren, it is certain that whoever learns it becomes immediately a Jew.”
 The other monk seizes the New Testament, and applies his habits of study and of diligence to it; and with that Bible he shakes all Europe; he shakes the world, and in a day opens upon Christendom the light of thousands of years. Need I say, I mean Luther? Nothing but his disciplined mind, and his habits of using that instrument, could have led him through the thick darkness which surrounded him, to the clear light in which we see him.

The study of *human nature* is a very important part of education. I know it is thought by some, nay, by many, that no one can understand men but those who are moving, and acting, and crowding among them. I grant that such a one is the only man who knows the forms and modes of doing business. But if the student has not, at the close of his academical course, a deep and thorough insight into the nature of man, it is his own fault, or the fault of his instructors. Men in active life will judge very accurately as to the manner in which you may expect men to act in such and such circumstances; but though, in these respects, their conclusions are accurate, yet they see not the motives of action, and look not so deeply into the soul as an accurate student. Let a man in active life undertake to probe the conscience of an audience he may have this and that fact, but can he do it as effectually as he who has read human nature, and pondered over it, in all its recesses and windings, in his study? Few men ever lived who moved among men so little as Jonathan Edwards. But did he not understand human nature? Can any one read his writings and doubt, for a moment, that he knew most accurately what the nature of man is? When such a mind pours out its strength upon the world, it does not make mistakes as to the principles of action. He might mistake in purchasing a horse, or a coat, for he never attended to such small matters; but a surgeon never dissected the body with more accuracy and skill than he does the soul of man. It is a tradition that Edwards knew not his own cows; but in the world of active, driving, bargain-making men, you will never find one who understands human nature as well as he did. And not he alone; but this is characteristic of all who are real students. They work upon the deep principles of human nature; those principles which are altered neither by time, nor fashion, nor outward circumstances. This is one reason why an educated mind will often send the arrow through the heart, while the uneducated man only twangs his bow. He makes more noise, but produces no execution. I doubt not that many will smile at the idea, that the hard student understands mankind; but you might as well smile at the philosopher, who, while he was managing

the electricity in the thunder-cloud, could not tell what outward shapes the cloud might, in the meantime, assume, or whether it moved fast or slow.

Self-knowledge is another important end of study. There are some men who have raised themselves to high stations, and maintained them, without a long course of mental discipline. But most are pedants, and self-conceited, unless they have accurately and repeatedly measured themselves by others. It is of great importance that you know what you cannot do, as well as what you can do. For this reason, with all the temptations and dangers attending a public education, I am satisfied it is much to be preferred to a private one. The wisest period in the whole of a man's existence is when he has just entered college. And why? Simply because the youth has not yet had the opportunity of measuring his attainments and capacity with that of his fellows. It is not merely that you sharpen the intellect, and add a keenness to the mind, by contact with other minds, but you strengthen it by the contact, and you learn to be modest in regard to your own powers. You will see many with intellects of a high order, and with attainments far beyond anything which you have dared call your own. There must be some radical defect in that man's nature, who can be associated in study, for years, with those who are severe students, and at the end of the period, feel that he is a very wise or a very great man. He has then but just stepped upon the threshold of learning, and but just looked out upon that field of knowledge and improvement, which is as boundless as the creation of God. The mouse, which thought his chest was all the world, was astonished when he stood upon the hill and looked out, to see what a great world lay beyond him. But what is the reason why a man must know himself exactly? What if he does over-rate himself? I answer, if he present a draft greater than his deposits, it will certainly be protested. There is so much vanity in the heart of every man, that he will not allow any one to claim more than his merits absolutely compel him to allow; so that if you place yourself on the list of those who over-estimate their own attainments or worth, you injure your usefulness and destroy your happiness. The modest man may, and will, draw vastly harder upon the sympathy and good-will of mankind than the forward man, with the same attainments, will be allowed to do. Modesty, to rest upon any fixed, stable foundation, must rest upon an accurate knowledge of yourself. This will be the result of study. The philosopher whose fame was filling all Europe, was so modest and retiring, that his good landlady one day mourned over him, and lamented that "the poor soul could never make anything more than a *philosopher*, after all."

We are in too great danger of neglecting the memory. It is too valuable to be neglected, for by it wonders are sometimes accomplished. He who has a memory that can seize with an iron grasp, and what he reads—the ideas simply, without the language—ment to compare and balance, will scarcely fail of being d- Many are afraid of strengthening the memory, lest it

their inducement and power to originate ideas—lest the light should be altogether borrowed light. The danger does not seem to me to be very great: especially since I have noticed, that those who are so fearful of employing this faculty are by no means to be envied for their originality. Why has that mass of thought, observation, and experience, which is embodied in books, by the multitudes of minds which have gone before us, been gathered, if not that we may use it, and stand on high ground, and push our way still farther into the boundaries and regions of knowledge? Much of originality in men and in books as you at first suppose, it follows, that memory is the grand instrument of conveying knowledge from one man to another. Its cultivation is of the highest importance. I mention it here, not now to direct how to cultivate it, but to state its immense value.

You will see, from what I have said, that the object of study *is to discipline the mind in all its parts; to show it where to find tools, and how to use them.* The exact amount of knowledge which is at any one time in the mind of the student, is not, and need not be, great. Like a good pump, you could soon exhaust it, were it not that it reaches an inexhaustible well beneath, and has all the apparatus for filling itself as fast as emptied. If the knowledge which he now possesses shall evaporate, it will, like the vapours which rise from the ocean, again return to the diligent student, by some other channels. It is thought by some, however, that no item of knowledge, and not a single idea which is once formed in the mind, can never be lost. It may be forgotten to-day, but it will come again to the notice of the mind in the course of the unending progress which is yet to be made by the human soul. How important that the knowledge which we acquire, and the thoughts which occupy our minds, be such, that, come when they may, we shall recognise them as pleasant companions and worthy friends! The immortality of light which awaits the good, is to be one of thought, of review, and of self-communion; and the night of ages which shall settle down upon the wicked, will not be other than sleepless.

